AGENCY FOR
INTERNATIONAL
DEVELOPMENT

DEVELOPMENT ASSISTANCE PROGRAM

FY 1975

TOGO, DAHOMEY, & IVORY COAST

DEPARTMENT
OF
STATE

MARCH 1975

CENTRAL WEST AFRICA REGION
DEVELOPMENT ASSISTANCE PROGRAM

TABLE OF CONTENTS

SECTION THREE: Country Annexes

F 31-33

G 26-31

H 22-28

TOGO
MACRO-ECONOMIC ASSESSMENT

1. Overall Performance of the Economy

Togo is a coastal state with inexpensive external transport and adequate rainfall for agricultural development. A Government policy of low import duties has led to its development as a corridor for trade--legal and illegal--with its neighbors. It provides a transport corridor to the sea for Upper Volta and Niger. From 1968 to 1973 the GDP of Togo grew by 55 per cent, or by almost 8 percent per annum in current terms, while per capita GDP grew to 43,400 CFA francs ($180) in 1973.[1/] Despite the industrialization policy of the government which is now beginning to show results, considerable intersectoral and interregional disparities exist, and the highest growth in the economy occurred in the commercial sector, which increased its share of GDP from 17 percent in 1968 to 20 percent in 1972; the secondary sector maintained its 20 percent share of GDP, growing at the same rate as the economy.

Agriculture lost some importance, declining from about 45 percent of GDP in 1968 to 39 percent in 1972. Such figures are only approximate, since much of Togo's agricultural production data are falsified owing to re-exportation. Agriculture employs 85 percent of the country's active population and supplied 66 percent of its 1970 export income. The largest part of production in this sector, around 75 percent, consists of food crops, about half of which are consumed on the farm. Official estimates indicate that food production increases at the same rate as population, but given the rate of urbanization and assuming a 1.0 income elasticity of food demand in the relevant range, this is probably an understatement, as food imports remained small and urban food requirements would thus grow at 8 percent per year. The 33 percent increase in the African food price index from 1968 to 1972 may have indicated excess demand, however. There are large regional differences in agricultural production. While the north of the country is arid, it is not a drought region, and millet and sorghum are produced, despite localized periods of shortage. It was proposed that the U.S. purchase excesses of this millet and sorghum for export to Upper Volta, but there is some evidence that these excesses are partially due to food assistance diverted south to Togo for sale.

Coffee, cocoa, peanuts, palm oil, copra and cotton account for less than one-sixth of the value of agricultural production and 7 percent of GDP; in 1970 they accounted for 66 percent of the value of exports. In 1973 this declined to 40 percent, partly from price changes--a decline in the prices of coffee and cocoa and increases in the price of phosphates, the country's

[1/] The value of the CFA franc has shifted in terms of the dollar from $1 = CFA 223 in October, 1974 to $1 = CFA 208 as this went to press in March, 1975.

largest export (46 percent of export income in 1973). The drought reduced production of peanuts, directly and perhaps from farmers producing subsistance crops after two years of drought, while official accounts that decreased producer prices for cocoa and coffee discouraged production of these crops. Since both are perennials, it is likely that the decline occured in unofficial imports rather than in production. The IBRD expects the world cocoa price to decline by 29 percent from 1973 to 1980, so lower cocoa revenues may be foreseen. Cotton production increased despite the drought. Livestock and fisheries remain small, about 2 percent of GDP coming from these sectors.

Mining is an important sector of the export economy. Although the marble industry has had difficulties, phosphate production has increased steadily: 1.5 million tons were exported in 1970, 1.8 million in 1971 and 1972, and 2.1 million tons were exported in 1973, benefitting from the increased world price which averaged 2850 francs per ton, as compared to 2475 francs in 1970; 1974 production is ahead of 1973 production, at trebled world prices. 1974 receipts should exceed 30 billion francs. No statistics are available on employment and wage income in this sector. It is probable that little of the benefit of this industry accrues to the Togolese economy, except that in 1974 the industry was nationalized, providing the government with an important source of income.

Manufacturing has become important, but the sector still suffers from problems. Textiles and marble have marketing problems, while manioc and palm oil processing have supply difficulties. Industry (including mining) accounted for 17 percent of GDP in 1972, the same share as in 1968. No data are available on industrial employment. The government has encouraged manufacturing by equity investment and loans in manufacturing enterprises, while indirect methods include a new investment code, formulated in 1973, favoring manufactured exports. With the assistance of UNDP consultants, a center for the promotion of small and medium enterprises (CNPPME) trains Togolese investors. Recent industrial development includes tourism and cement manufacture, while a refinery is under construction. A fertilizer factory to process phosphates is also planned, while a large industrial slaughterhouse is under construction in Lome, despite the lack of an indigenous livestock industry.

No estimates exist for the size of the service sector. Commerce is the second largest sector of the economy; its prominent role stems from Togo's location as a corridor between its neighbors, and its liberal trade policy based on low import tariffs. Commerce provided 20 percent of GDP in 1972, growing at 12 percent over the period since 1969, while transport grew at 11 percent; that these two sectors were the only two to exceed the average growth rate for the economy indicates the dependence of Togo's growth on foreign trade.

Government accounts for about 7 percent of GDP. Expenditures rose at 14 percent per annum from 1966 to 1970, and 15 percent thereafter, while employment rose at 11 percent per annum over the total period, dominated by social services representing 41 percent of total government employment of 15,261 in 1972 (or 18,903 in 1974). Economic services represented 19 percent of government employment, general administration 24 percent, and defense 16 percent. In recent years the budget has been spent first on education (11 percent of the 1974 budget), defense (10 percent) and public health (7 percent). The capital or investment budget is funded from the anticipated surplus of total revenues over operating expenses, which was calculated at 1.5 percent billion francs for 1974, but revised to 2 billion francs following new 5 percent export duties on phosphates, cocoa and coffee, and increased Government revenues from State shares in enterprises. The 1975 budget would free large sums for investment following the nationalization of the country's largest industry in 1974. It is uncertain what use the government will make of these phosphate revenues in its 1975 budget, as the 1974 budget accounted for only a fraction of these windfall revenues. The investment budget currently finances major state development projects in agriculture, industry, tourism and construction; it is expected to total 2 billion francs in 1975, with one-quarter each going to rural development and socio-cultural infrastructure.

2. Balance of Payments

Tables II and III signal that difference between trade figures for Togo which ignore and include, respectively,unofficial trade. This difference renders analysis of these figures very difficult, as similar items may be consumed domestically or re-exported, may be produced domestically or imported. The 1971 decline of food, beverage and tobacco imports probably reflects a decrease in border trade rather than an increase in local self-sufficiency.

The favorable trade balance until 1969 was largely due to the rapid growth of exports, by 22 percent per year. Cocoa represented 41 percent of 1970 exports, phosphates 24 percent, and coffee 17 percent, while palm products, cotton and peanuts were also exported in significant quantities. Much of this improvement was due to improvement in the terms of trade during the late 1960: cocoa prices (f.o.b. Lome) doubled between 1965 and 1970. Prices increased for coffee,palm oil and cotton, while those of phosphates declined. Except for the CFA franc devaluation in 1969, the price of imports remained constant in this period, while export prices improved. Since 1969 the terms of trade have largely deteriorated: import prices have soared, while export prices, particularly those of cocoa and coffee, declined, although this trend was temporarily reversed in 1972-73 after a 21 percent terms-of-trade decline.

The IBRD Price Forecasts for Major Primary Commodities (1974) estimates a 29 percent cocoa price decline from 1973 to 1980, while all Togo's major export crops will undergo similar declines. Unlike other Entente countries, however, much of Togo's shortfall will be absorbed by phosphate exports.

Using 1973 exports as weights, the IBRD price projections lead to a 52 percent increase in the real value of the 1973 export mix in 1975, or 41 percent in 1980 (signifying a price decline over that period). The international price index is expected to increase 81 percent over this period, so in 1975 the 1973 mix would buy only 83 percent of the imports it would pay for in 1973,and only 78 percent in 1980. We have stressed elsewhere that this measure is imperfect and downward-biased. What is of interest here is how well Togo does compare to the other Entente countries by this measure: Niger, 60 percent, Ivory Coast 61 percent. The unpredicted large increase in phosphate prices has improved Togo's overall terms of trade.

The terms of trade facing the small agricultural producer will be declining sharply over this period. This change in Togo's export mix heralds a significant redistribution of income which could interfere with the country's plans for rural development. Development assistance to Togo should thus be concentrated in this rural sector.

Much of the improvement in trade during the 1960s was used to build up government reserves and foreign exchange reserves. Grant aid from abroad has been significant in the balance of payments, reaching 4 billion francs in 1969 and 1970, and 5 billion francs in 1971. The French FAC provides approximately 30 percent of total aid, FED and the Federal Republic of Germany 25 percent each; 72 percent of Togo's aid thus comes from two original donors, and Togo would like to diversify these sources. The Government has expressed a dislike for aid distributed through multilateral channels, which do not accord well enough with its own development objectives expressed in its Plan. In 1973 FAC signed conventions for aid totalling 1.5 billion francs, while projects approved or pending in 1974 reached 1.2 billion francs. These projects were primarily in rural development. Togo has not received French budgetary support since 1965. The IBRD considers Togo an IDA "soft loan" country.

Togo's external payments are close to a balance, yet it depends on foreign assistance to achieve this balance and for 70 percent of its development financing. It is likely that in the coming years the high phosphate price, if continued, will greatly facilitate this financing, but at the expense of producers of export crops; further, the development scheme followed by Togo is capital-intensive, and hence requiring a high level of imports.

3. Human Resources

In 1970 Togo produced a general population census which found a total population of 2.1 million, well over the population projected on the basis of the 1960 INSEE survey.

The Togolese population is relatively young, with 48 percent under the age of 15, and only 43 percent in the 15-49 year group which comprises the active population. It is growing at 3 percent, due almost entirely to natural increase.

The distribution of this population is uneven, with 34 percent in the densely-populated coastal province and only 14.5 percent in Savannah region. Over 25 percent of Togo's arable land area is unoccupied. There are large income differentials between farmers in the north, which are disadvantaged by soil and climate, and the south, leading to migration from the northern rural areas to the south and to the towns. The Maritime region grew at 3.4 percent per year between 1960 and 1970, while Kara region, due to outmigration, grew at only 1.5 percent; urban population increased from 11 percent to 13 percent of the total population. International migration, while it exists, is not considered important, except in that many skilled Togolese do not return from France or other training locations; this is a significant loss to the economy, only partly compensated by factor flows in the balance of payments.

Although human promotion was advanced as one of the three priorities of the 1976-1980 plan now in preparation, the base from which such development will spring is not specified. Several contacts suggested a manpower shortage in the category of skilled technicians. The Government appears to be unable to prepare some portfolios for funding, but it is unclear whether this represents absorptive capacity limitations or a lack of appropriateness of the project with respect to the Government's priorities.

The Government has opposed improving existing cattle marketing devices, preferring its own scheme of purchasing cattle at the frontier markets and transporting them by truck to the coast. Such a scheme, which is needlessly expensive and would probably upset the meat markets of intermediate towns, as well as other proposals leave a doubt if the Government is seriously planning with its own people, or merely planning the capitalization of the economy. The decentralization policy appears to be largely on paper and does not extend to the level of those most affected; manpower requirements appear as an afterthought.

While there is promise of agricultural extension training with the establishment of regional agricultural schools, the government approach to agricultural development leads to fears that this reform is prepared without an understanding of the needs of the farmers who would be affected. The establishment of a university is seen by the Togolese as the only means to retaining the higher-level cadres who often do not return to Togo. The principal need, however, remains middle-level cadres.

4. Government Priorities

The government of Togo is finishing its second 5-year plan, and on the basis of evaluation of this plan's performance is preparing its third plan, for 1976 to 1980. The third plan's priorities will be agricultural development, rural development and human promotion. The Plan Ministry desires internal financing to cover 75 percent of the total expenses, but this will be difficult, since 70 percent of development needs are now met by external donors. Some

potential capital funding goes to rural animation to politicize and mobilize the people, the benefits of which to development are not quantifiable. Due to transnational scale necessary for Togo's industrialization, the Government is promoting regional-economic integration, particularly within CEAO and CDEAO, a 15-state organization which includes Nigeria. The government pursues bilateral agreements to define narrower interests.

Agricultural development implies irrigated agriculture, both in foodstuffs and for export. No serious cost-benefit study seems to have been made. The government is willing to attempt a wide range of approaches, from large to small farms, state farms or private, with the goal of increased production. It is unclear what human costs the government is willing to accept to achieve this goal, nor is it clear what contribution has come from the small farmers in this plan. Another sub-priority is health: the Government wishes mobile units based in each chef-lieu with a hospital for each unit; the emphasis appears to be on curative rather than preventative medicine, a capital-intensive proposition.

5. Credit

Review of the institutional structure development financing is necessary to adapt credit to needs. Overhead expenses of development banks are high and financial results unfavorable. Most credit is channelled through two institutions, the Banque Togolaise de Developpement (BTD) and the Caisse Nationale de Credit Agricole (CNCA), which is limited in theory to agricultural credit, although its long-term portfolio consists only of mortgage loans to certain personnel. 49 percent of CNCA loans are channelled via SORAD, regional development societies. These funds come mostly from the public sector, permitting interstate-rate subsidies, which in turn encourage misuse of funds if the non-price rationing mechanism used is inefficient. The policy also encourages overcapitalization of agricultural projects rather than extensive projects affecting the majority of the farm population. The director of CNCA proposed to us an integrated development scheme which would consist of mechanically-cleared land provided for large cooperatives, installing and training appropriately-chosen young peasants, introducing them to oxen traction and irrigated agriculture, improving the rural habitat, and offering it to these chosen peasants on credit, all in the space of 5 years. Experience elsewhere suggests that this scheme is unrealistic, yet it is seriously proposed. CNCA has not provided data on the quality of its outstanding loans, so one cannot judge its past performance; it appears to have little relation to the majority of farmers.

BTD obtains its financing from various sources, at a variety of rates. According to M. Latortue of CNPPME, it lacks the capacity to evaluate projects. The Bank notes this in the area of market studies. Second, the non-price rationing necessary with low-interest loans has been used to political ends

rather than for development; for instance, part of the USAID Entente Enterprises Loan was used to give long-term low interest loans to politically powerful market women for working capital; as commercial short-term capital is not in short supply, the capital is being misused. The largest borrower in the AID loan has complained that funds were not being released, but the BTD denied this and we could not verify it. BTD requires an improved evaluation capability; Latortue complains that it is more conservative in its policies than commercial banks, and the data support this accusation.

In addition to BTD and CNCA, long-term investment funds are available from the French Caisse Centrale, the Caisse Nationale de Securite Sociale, and from OPAT, the Agricultural stablization fund. The Government has established the Societe Nationale des Investissements (SNI) to provide loan and equity capital to public and private ventures and, in theory, to administer a guarantee fund for loans to domestic enterprises, though this is currently inoperative. SNI is supported by SNPPME, which tries to study promising areas for Togolese private sector activity and helps private entrepreneurs in preparing projects. The Government aim is greater and more effective mobilization of domestic resources for development financing.

Although development banks should support long-term investment, the credit structure of Togo is over-represented by short-term credit (35 percent of the credit of BTD and CNCA in 1973, versus 77 percent in 1972 for all banks), with a disproportionate share of portfolios in mortgages (28 percent of all credit). See Table VI. The existence of CNCA assures agriculture a decent share of the total--36 percent--but 73 percent of this credit is short-term, and 23 percent more is on current account. This is not promising, particularly for the small producer. 16 percent of total credit is to artisans and industry, and of this, 63 percent is long-term, 35 percent is medium-term and only 1 percent is short-term or current. The lack of utilization of some credits available via the BTD to the private sector does not necessarily indicate lack of absorptive capacity: a large Kreditanstalt loan has gone unutilized due to the foreign-exchange risk of loans expressed in German marks.

Though it is preferable to develop domestic institutions with AID funds rather than develop parallel institutions, serious thought should be given to the improvement or control of these financial enterprises, including the training of bankers in project evaluation, as a precondition to future AID financing.

Togo is on the threshold of industrialization in a society too small to provide its own internal markets, with a comfortable government surplus to provide public investments, but without effective organizations to extend development to the majority of its people. Its need for foreign funding has been great, but will probably diminish with the foreign exchange earned by phosphates, unless it undertakes more capital-intensive investment than at present. The long-term trend in Togo's terms of trade accentuates also

the current maldistribution of the benefits of growth in the country, in the absence of large-scale government transfers. The Togolese government wishes to achieve integrated rural development, but appears to lack the means to do so. Internationally, Togo's growing industrialization will increase its interest in regional cooperation, since its growth cannot be expected to continue on its present course on a base of illicit trade; however, it does not agree with the current AID philosophy of channeling assistance through the Entente, which does not share the development goals of the Togolese government.

Table I. Togo. Gross Domestic Product at Market Prices.

(Unit: Billion francs CFA)

	1968	1969	1970*	1971*	1972*	1973*	Per Cent: 1968	1972*
Agriculture, livestock, fishing.	26.7	29.9	30.2	31.7	33.3	n.a.	44.6	38.7
Secondary Sector:	11.8	13.4	13.5	15.5	17.3	n.a.	19.7	20.1
Industry, incl. mines	10.3	11.5	10.9	12.5	14.4	n.a.	17.1	16.7
Construction	1.5	1.9	2.6	3.0	2.9	n.a.	2.5	3.4
Tertiary Sector:	21.4	26.3	29.7	32.1	35.4	n.a.	35.7	41.2
Commerce	10.2	13.2	15.5	16.1	17.2	n.a.	17.1	20.0
Services & transport	7.5	9.1	10.1	11.0	12.1	n.a.	12.6	14.1
Administration	3.6	3.9	4.1	5.0	6.1	n.a.	6.1	7.1
Gross Domestic Product	59.9	69.6	73.4	79.3	86.0	93.1		
National Income	49.3	57.3	61.8	67.2	73.3	79.8		
(Unit: francs CFA)								
Income per capita	27513	29452	30997	32957	35073	37220		
GDP per capita	33441	35814	36803	38892	41150	43400		

* Provisional

Source: Comptes nationaux, 1969 (1973), cited in BCEAO

Table II. Togo. Balance of Payments

(Unit: Billion F CFA)

	1968	1969	1970	1971
Exports, fob	14.9	18.9	19.1	20.5
Imports, cif	13.4	17.3	20.9	22.8
Trade balance	1.5	1.6	- 1.6	- 2.3
Services, net	- 2.2	- 2.3	- 1.8	- 3.1
Net transfers	2.7	4.7	4.3	5.2
Private	(0.2)	(0.2)	(0.2)	(0.1)
Government	(2.5)	(4.5)	(4.1)	(5.1)
Net capital	0.1	- 1.6	- 0.7	1.2
Direct investment	(-0.1)	(0.2)	(0.3)	(1.0)
Medium-long term private	(-0.1)	(-0.3)	(-0.4)	(-0.2)
Short-term private	(0.2)	(-1.3)	(0.7)	(-0.3)
Government	(0.1)	(-0.2)	(-1.3)	(0.7)
Net errors and omissions	- 1.6	1.0	- 0.6	- 1.6
Surplus	0.5	3.5	- 0,4	- 0.6
Allocations SDRs	-	-	0.5	0.4
Overall balance	0.5	3.5	0.1	- 0.2

Source: Banque Togolaise de Developpement, Annual Report 1973, and IBRD.

Data adjusted for unrecorded trade with neighboring countries.

Table III. Togo. Commercial Balance.

(Unit: Million francs CFA)

	Exports	Imports	Balance	Coverage
1968	9549	11623	- 2074	82.2 %
1969	11477	14572	- 3095	78.8 %
1970	15176	17928	- 2752	84.6 %
1971	13627	19455	- 5218	70.0 %
1972	12659	21381	- 8722	59.2 %
1973	13755	22388	- 8633	61.4 %

Source: BCEAO

Table IV. Togo. Imports by Groups

(Unit: Million FCFA)

	1968	1969	1970	1971	1972	Per Cent: 1968	Per Cent: 1972	1973
Food, beverages, tobacco	2189	3183	4071	3716	4036	18.8	18.9	4447
Energy and lubricants:	536	679	785	1069	1197	4.6	5.6	1155
Primary materials:								
Animal, vegetable:	229	238	236	747	755	2.0	3.5	734
Mineral:	80	97	178	121	105	0.7	0.5	125
Other semi-finished prod.	1492	1898	2761	3042	2775	12.8	8.3	3611
Finished products:								
Agriculture:	46	74	76	116	85	0.4	0.4	129
Industry:	2302	2859	3274	3884	5219	19.8	24.4	5260
Consumption:	4749	5544	6547	6660	7208	40.9	33.7	6928
Total:	11623	14572	17928	19455	21380			22388

Source: BCEAO

Table V. Togo. Exports of Principal Products

(million francs cfa)	1970	1971	1972	1973	Per Cent: 1970	Per Cent: 1973
Shelled Peanuts	219	267	100	-	1.4	-
Palm nuts	656	517	191	210	4.3	1.5
Copra	59	14	11	3	0.4	0.02
Cotton fiber	28	39	49	36	0.2	0.3
Coffee	2657	2435	2599	1801	17.5	13.1
Cocoa	6336	4246	3719	3556	41.8	25.9
Manioc	78	103	40	8	0.5	0.1
Phosphates	3720	4787	4794	6267	24.5	45.6
Others: (and errors in above)	1423	1219	1156	1874	9.4	13.6
TOTAL	15176	13627	12659	13755		

Table VI. Togo. Distribution of Credit to the Private Sector, 1973
(Unit: Million francs CFA)

	Long Term	Medium Term	Short-Term	Current Account	Doubtful	TOTAL:	%
Agriculture	-	77.4	1337.6	426.6	1.5	1843.1	36.4
Artisinat/Industry	505.4	284.8	0.4	7.2	8.7	806.5	15.9
Commerce	46.9	96.2	0.5	-	12.8	156.4	3.1
Buildings	972.6	308.9	0.5	-	138.3	1420.6	28.1
Automobile	-	12.2	13.5	-	1.0	26.7	0.5
Constr./Small Eqpt.	-	-	469.8	-	26.5	496.2	9.8
Personal Loans	-	-	56.3	-	1.6	57.9	1.1
Public Agencies	223.5	32.1	0.2	-	-	255.6	5.0
TOTAL	1748.4	811.6	1878.8	433.8	190.4	5063.0	100.0
Total BTD	1737.8	734.2	541.2	7.2	190.4	3210.8	63.4
Total CNCA	10.6	77.4	1337.6	426.6	*	1852.2	36.6
%	34.5	16.0	37.1	8.6	3.8	100.0	

* CNCA does not separate doubtful loans from others.

Source: Banque Togolaise du Developpement, Annual Report, 1973
Caisse Nationale de Credit Agricole, Annual Report, 1974

TOGO
AGRICULTURE AND LIVESTOCK SECTOR ASSESSMENT

Agriculture, though still the most important sector in the Togolese economy, has been contributing a declining share to the GDP in recent years. Agriculture's share was 41 percent in 1971 and over 37 percent in 1973. While the cash crops (principally cocoa, coffee, cotton, palm oil amd peanuts) are commercially very significant, food crops are far more important, accounting for 75 percent of the agricultural production, about one half of which is consumed on the farm.

Climate and soils are generally favorable for agricultural development. It is estimated that as much as one half of the cultivable land is not yet being used. The potential for increasing agricultural production is very good; yet, there has been very little development except for some of the export crops. Incomes of farm families average only $70 per capita -about one fifth of the rest of the economy. Incomes of farm families in the northern savannah areas are even less. As a result many people have been moving from the North to rural areas in the South, and to the cities, in search of better opportunities.

I. Definition of National Food Problems

A. Food Crops

Although there are no reasonably accurate statistics in the area of subsistence food crops (IBRD report), it is felt that the increase in production of food crops has not kept pace with the increase in population, especially in the poorer regions of the country (the North) and in those regions where population pressure is strong.[1/] The evidence of this failure to keep pace is found not in the Ministry of Agriculture statistics which the IBRD finds suspect, but rather in the fact that there have been serious difficulties in supplying cassava to the cassava starch mill in Anecho region.

The Ministry of Agriculture statistics are as follows:

Crop	1962	1963	1964	1965	1966	1972
			(000 metric tons)			
Cassava	987	1088	1015	982	1015	569
Yams	857	1000	1232	891	936	507
corn	84	66	77	88	111	122
Sorghum/millet	74	118	125	135	128	151
Rice	18	23	17	15	29	13

1/ The agricultural production survey of 1972/73 indicated that the old series of estimates showing area cultivated and volume of production were exaggerated. A division of statistics has recently been established in the Ministry of Rural Economy to revise the methods of collecting data.

The statistics from 1972 appear to be much more realistic than the 1963-66 statistics which IBRD felt were inaccurate.

According to the IBRD, there are three basic causes for the lack of development in the food crop subsector: 1) the insufficiency of past investment in agriculture as well in infrastructure suited to the needs of the agricultural sector; 2) the inefficiency of the extension services and 3) marketing and price policies designed to encourage exports and increase revenues to the central government and not to encourage food production. As a result of these fundamental problems, nearly all the food crops are still grown by traditional practices and have shown no increased productivity per man or per hectare.

There are many implications to a continuance of this trend. Unless productivity per man increases in the food subsector, increasing amounts of food will have to be imported to feed the growing urban population. This coupled with very slowly increasing agricultural exports could increase Togo's balance of payments problems. The most serious implications of current trends in agricultural production are in the area of quality of life. The rural areas have not been developing until now and therefore any social benefits that have accrued have generally been in the urban areas or in regions of commercialized agriculture. The recent Sahelian drought has affected only the northern areas of Togo which had never received development priorities and therefore the ones with the least were hit the hardest.

In some areas of Togo, Anecho in the south and Kara in the North, population pressures and poor cultural practices have led to soil deterioration. This deterioration was accelerated by the drought in the Northern regions. However, much of Togo is well endowed with good soils and a favorable climate for diversified crop production.

Land tenure has been a factor in the declining trend in production, explaining in part why some of the potentially most productive lands are not being used. GOT, with assistance from FAO, has undertaken a program of land reform. Legislation was enacted at the beginning of 1974. The intent is to put all cultivable idle land at the disposal of those who can use it, whether individuals, cooperatives or the newly created agricultural promotion agencies.

B. Livestock

Comprehensive statistics on livestock are not available but estimates indicate that there has been no growth in the livestock populations from 1970-1973. World Bank reports estimate that numbers of sheep and goats have declined from 1.4 million in 1970 to 1.3 million in 1973; that the cattle population remained at 0.2 million head and that the poultry population has

stagnated at 2 million birds. Meanwhile domestic demand for meat has been rising and Togo continues to import substantial and increasing amounts of meat products.

II. National Response to Food Problems

A. Government Priorities and Policies

In June, 1974 the President of the Republic of Togo announced new policies, giving the agriculture sector first priority. He called for "mobilizing" the producers of food crops and livestock and "halting" the rural exodus as two national goals. The President at the same time announced substantial increases in producer prices of important food crops for the 1974/75 crop year. He also announced that credit and extension services would be geared more to the agricultural sector and that the fertilizer plant, which is planned to be in production by 1976, would meet fertilizer requirements of Togolese farmers at highly subsidized prices.

1. Food Crop Priorities

The Ministry of Planning outlined more fully the goals for agriculture for the 1976-85 period. The goals are:

- -to produce enough of all food products for domestic needs;
- -to produce for processing (i.e. pineapple juice, animal feed, palm oil, meat, corn meal, etc.) for the domestic market as well as for export;
- -to export raw agricultural products (i.e., coffee, cocoa, and cereals).

By 1985 they want to be well on the way to meeting these goals. Many of the specific programs and projects for meeting these goals have yet to be developed.

Agriculture in Togo, especially in food crops, has been based almost exclusively on traditional techniques. The GOT wants to modernize and increase production. The plans for the 1976-85 period will include several types of production organization:

- -large scale state owned production units, of which a part would be farmed out to individuals;
- -large production units run directly by private organizations;
- -large production units run by peasant cooperatives;
- -individual farms of smaller size run by Togolese and foreigners; and
- -traditional farming structures, but modernized.

(Apparently the government is unaware of or unconvinced by the impressive record of failures of large scale agriculture in Africa or in LDCs in other regions. The myth of great economies to scale persists).

2. Livestock Priorities

The GOT places a high priority on increasing the domestic meat supply and has developed a long list of projects dealing with livestock production, veterinary services and livestock marketing which it hopes to undertake during the second five year plan. The proposals are listed below.

a. Livestock production

(i) Study of the conditions of livestock production in Akoposso area (24.5 million CFA - this was included in integrated development projects for Plateau region (FED).

(ii) Transit Center for Action N'Dama (Nassable Dapange). DEIA (20 million CFA) - withdraw in favor of No. (i).

(iii) Center for sheep and goats at Barkoissi (27.5 million CFA). Now estimated at 50 million CFA. For 600-1200 ewes, to serve as an extension center for animal selection. One is proposed at Mango-Dapongo, another at Lamakara-Sakadi and at Tobligbo. A center has been built at Ossacre by SORAD Kara, but it was included in the Kenan reserves and so cannot be used as a livestock center. GOT indicated this should have first priority for financing.

(iv) Livestock Center at Kougnokou. Feasibility studied by WIP for FED. Hoped for 45,888,000 CFA from FED.

(v) Center for selection of Borgou cattle. Study expected under the ELC (21 million CFA).

(vi) Cattle growing and feeding center. (Na Sokadi) DEIA project. Not yet studied by Livestock Service for feasibility.

(vii) Adile's Ranch. Project designed by WIP for FED. Initial investment of 240,771,000 CFA. This and the Bena ranch are to produce improved stock for hearders and to produce a substantial amount more meat.

(viii) N'Dama multiplication center. (32 million CFA) Germany has already financed importation of 20 bulls and 100 cows from Zaire or Congo at Aventou Center. This was given second priority for assistance.

(ix) Equipping Baguida farm (75 million CFA). FED financing in preparation.

(x) Aventou Livestock Center. German assistance for 103 million CFA. Already stocked with imported N'Dama. Studies in progress on range land classification and cattle nutrition; crossing local cattle with Simmental: providing improved boars and supplementing

the meat supply.

(xi) Strengthen poultry extension with Togo grain. The GOT indicated this has third priority.

(xii) Akposso Bena Ranch. Similar to Adile Ranch German-Moroccan and African corporation.

(xiii) Crossing with Wakwa Cameroon blood. Private enterprise. (18 million CFA)

b. Veterinary Services

(i) CBPP campaign for 220 million CFA of which 145 is hoped to come under the ELC regional project (which has not been funded).

(ii) Building four veterinary control posts on the Upper Volta frontier (included in (i) above).

(iii) Building 14 veterinary posts (63 million CFA). Submitted to FAC.

(iv) Quarantine center and finishing ranch at Gando (6.5 million CFA). Final phase of CBPP elimination program.

(v) Diagnostic laboratory at Mango (2 million CFA). Not financed.

(vi) Cattle trails from frontier with Upper Volta. Submitted to ELC for USAID loan (12.3 million CFA). With the markets this is now a 250-300 million CFA project for ELC loan.

(vii) Manufacture of mineral licks. (3 million CFA) FED.

(viii) Central Veterinary Research Laboratory (50 million CFA) DEIA project. Not yet started.

(ix) Veterinary services delivery for small ruminants. CDBV asked to study feasibility for inclusion under USAID loan. Awaiting expert.

c. Markets and Abattoirs

(i) Mango - Atakpanae market. Submitted to ELC Loan (originally 4.3 million CFA).

(ii) Terminal Market at Togblekope for Lome. (8 million CFA) ELC loan.

(iii) Lome Abattoir (555 million CFA). FAC 165 million and CCCE loan 200 million CFA. Will start immediately.

(iv) 20 local abattoirs (10 million CFA) from ELC loan.

(v) Lome Cattle Market (15 million CFA). Not financed.

(vi) Equipment of modern butchery (2.5 million CFA) not financed.

The following comments are offered on the above list of livestock project proposals:

The Livestock Service would like USAID to support three centers for sheep and goat production with 600-1200 breeding females each. The proposal is to include a U.S. technician plus a PCV per center. The centers are first to multiply stock and then to develop an extension program providing breeding stock to the peasants. This idea was not received enthusiastically because a large sum goes into building and administering the three centers ($750,000) and little direct or indirect benefits will be obtained by the farmers.

The second priority is a center for multiplication of N'Dama cattle. The Togolese were originally planning a one million dollar project, but because of lack of sponsorship have left it at about $130,000. While they might profit from more N'Dama cattle, the Germans have already spent about $150,000 on importing N'Dama from Congo or Zaire and it would be advisable to see how this project develops. The Togolese could almost certainly buy N'Dama cattle from Mali using the existing commercial circuits at a competitive price and truck them from Upper Volta, if more stock is needed.

The third proposal was a poultry center and extension program in association with Togo grain (the Government's grain promotion and marketing organization). If there is a reasonable supply of milling offals and locally produced feeds, this might be feasible. There are already some large scale modern pig and poultry operations and so there is some possibility that the demonstration and inputs supply is available.

The list of projects for which the GOT is expecting or perhaps only hoping for money from the ELC-USAID loan is alarming. It includes a small ranch for selection of Borgou cattle (probably better done by buying some selected animals from the Ivory Coast); the CBPP campaign and building veterinary posts at the Upper Volta frontier; cattle trails, markets, and 20 small abattoirs; and veterinary service delivery for small ruminants. This almost certainly calls for more than the fund currently has available for Togo.

B. Implementing Institutions

In 1967 the government established five 'Societes Régionales d' Amenagement et de Developpement' (SORADs), one for each of the five administrative regions. Each SORAD was made responsible for the development programs within its region. The SORADs are expected to provide extension services, implements, seeds, fertilizer, insecticides, etc., and to act as intermediaries between credit institutions and the farmers.

It is now generally agreed that the SORADs have not been very effective in helping the farmers. FED is now emphasizing, with GOT approval, support for commodity groups such as SOTECO (cotton), SOTEGRAN (cereals), etc. These commodity groups have to carry out programs broad enough to include the major crops in a rotation within a region. For example, SOTECO is concerned with food production as well as cotton.

Two new developments may improve the situation:

1. UNDP has started a rural development planning unit, which should provide guidance on priorities and development planning; and

2. IBRD is considering a rural development project in the Maritime region. If this develops, it can be expected to set up a regional development organization that is likely to be effective, and which could be used as a model by other donors.

At present, the support of the Dapongo and maritime regions has been from FAC. Makar has been supported by UNDP and central and plateau regions by FED. As mentioned earlier, IBRD is considering an intensified program for maritime region. FED is planning to support STTECO with the Blao (Atakpame) project, which will also involve training of Togolese "encadreurs" to promote the production of food crops. Cotton is a recent introduction in Daphonga region.

The SORADS multiply the commercial seeds of food grains but there is need
-for IRAT to include a wider spectrum of varieties for multiplication,
-for field testing of varieties in each region at levels of fertility used by farmers[2/],
-for multiplication of the elite seed. (last year IRAT was short of seed)

The present schemes for multiplication of commercial seeds is foundering due to lack of new varieties suitable for adoption by farmers.

FED has been trying to develop a livestock program. It has agreed to improve veterinary service delivery and to make sure mineral supplements in Togo. There is need for well bred Taourin bulls to produce oxen large enough for work. In the proposed program for animal traction, FED will give a grant for each pair of oxen and each cart placed on a farm.

C. Agricultural Research

The Ministry of Rural Economy has a research unit with divisions which include (1) soil studies; (2) nutrition and food technology; (3) socio-economic studies; (4) agronomic research; (5) livestock research; and (6) relations with foreign research institutes. The Research Unit has a staff of 15 professionals. Research by IRAT in Togo has to this point been adaptive rather than basic. They currently have research programs at 11 stations in Togo. Most of their work has been with fertilizer trials and improved cultural practices.

2/ FED has contracted with IRAT to do local trials on two locations in Plateau and one in Central region. There has been some success in maize and manioc but little in sorghum/millet.

D. Agricultural Credit

The Caisse Nationale de Credit Agricole (CNCA) was established in 1967 to provide credit through the SORADs for financing purchase of equipment and inputs and land development. The Office des Produits Agricoles du Togo (OPAT), a marketing organization for cash crops, also provides subsidies and loans to the SORADs.

E. Marketing of food crops

Because of the persistent decline in food production there has been a recent shift in development strategy to encourage production through higher producer prices and subsidized inputs. The new policies include price increases ranging from 25 percent for manioc to 52 percent in the case of rice. In order to regulate the supply and prices of foodcrops a public agency, the Togograin, was established in 1973/74. Togograin is supposed to buy food crops at harvest time when domestic prices are low and sell them when prices are high in order to reduce the price levels. There are diffieulties in doing this effectively near the borders as long as prices in neighboring countries are much different. At the present time Togograin is handicapped by a lack of storage facilities. It has the capacity to stock only 3,500 tons of maize in the South and 3,000 tons of millet in the north.

IV. Recommendations for possible AID Interventions

A. Probably the most important single program which USAID could intensify, from the agricultural and livestock point of view, is the major cereals project (JP 26). In exchange for assistance in multiplying elite seed, IRAT could, in collaboration with a field trials officer shared with Dahomey, test more varieties, including some with no added fertilizer. Regional trials of a similar nature could be set up within Togo and Dahomey and multiplication of elite seed could either be done separately or for the two countries collaboratively.

B. If the IBRD succeeds in developing an effective form of organization, USAID should consider a regional development project with SORAD Dapongo and SOTECO. The cotton (SOTECO) operation has been found by FED to mobilize farming by introducing a cash crop and stimulating the production of food crops. However, a breakthrough in a new sorghum or millet variety acceptable to the local farmers and citizens is an essential precursor to increased food production. Ox traction, farm machinery and carts, credit, improved practices in crop production, grain storage,small ruminant production, peasant livestock finishing, improved veterinary care are all possible elements of a program. This should be placed in an integrated rural development program with education, health care, infrastructure improvements, etc.

C. There is almost certainly need as in Dahomey for a grain drying and storage program, especially in Southern Togo. This could be done by PCVs help and instructing Togolese to work in an extension program of building grain dryers and storages. The Togolese would then work in the FED, FAC and proposed IBRD development projects.

D. The feasibility of mounting a small farmer poultry (and pig) production scheme, perhaps with a portable grinder mixer through the existing cooperatives, should be studied. It is essential that a supply of locally produced feed be available. This may be a natural follow-on for the grain drying and storage program.

E. An attempt should be made to ensure that the ELC and GOT Livestock Services have a full understanding of what the GOT needs and what it can expect to receive from the USAID loan to the ELC.

Appendix Table I - Estimated Livestock Production Togo - 1972

	Beginning Year (Number)	End of Year (Number)	Reported Slaughter (Number)
1. Cattle			
Female			
Calves < 1 yr.	35,447	42,792	1,066
Heifers > 1 < 2	25,924	25,813	643
> 2 < 6	40,575	41,290	1,732
Cows 6 - 10	27,850	30,815	846
> 10	1,539	1,054	479
Total females > 1	95,888	98,972	3,700
Male			
Calves < 1 yr.	35,797	40,103	812
> 1 < 2	10,860	7,924	3,410
> 2 < 6	2,267	1,835	1,880
6 - 10	2,008	3,926	547
> 10	112	51	76
Total males	15,247	13,736	5,917
Total One Year	111,135	112,708	
Total Calves	71,244	82,895	
Grand Total Cattle	182,379	195,603	24,784
2. Sheep	422,726	723,606	15,624
3. Goats	479,223	616,999	18,572
4. Pigs	204,183	218,797	9,920
5. Poultry	2,075,813	2,158,470	

Appendix Table II - Trend in Reported Slaughter, Togo

	1966	1967	1968	1969	1970	1971	1972
CATTLE	14,261	15,093	17,407	18,016	24,946	21,905	24,784
SHEEP/GOATS	24,957	29,604	39,311	35,498	37,412	33,471	34,243
PIGS	10,416	11,403	10,995	9,550	9,657	9,570	9,920

TOGO
EDUCATION AND HUMAN RESOURCES DEVELOPMENT SECTOR ASSESSMENT

Togo began its First Five Year Development Plan (1966/1970) some six years after independence in 1960. The first Plan was to establish "basic structures indispensable to harmonious development." The Second Five Year Plan (1971/75) has sought to build upon the first by undertaking development projects derived from the first plan's experiences. The future plans will seek to secure the economic take-off of the Togolese economy.

Togo's population in 1971 was established to be 2,006,770 of which 260,880 lived in seven communes and 1,745,890 lived in rural areas. In terms of employment it was estimated that of an active population of 667,000 (34 percent of the total), 518,000 were employed in agriculture. Government has grown from 8,000 employees in 1966 to 15,000 in 1972. In view of the high level of commercial and construction activity in recent years in Togo, it is also estimated that private and the public employment levels are about the same. Nevertheless, GOT officials think that unemployment is an increasingly serious problem. As is true in many West African countries, there is a continuous flow of young literate adults from the rural to the urban areas--a circumstance associated with the low income levels and the slow rate of development in rural areas. Those arriving in the cities are finding it increasingly difficult to find employment--their education has contributed to their decision to seek employment in the urban areas but it has not qualified them for jobs there. On the other hand, educators in Togo feel certain that primary education in its present form does not prepare the children for rural life either. Faced with these problems, authorities envisage a long-term reform to make education more responsive to the country's needs.

I. Formal Education

The GOT places a major emphasis on the development of its educational system, although the expenditure level for education, approximately 1/6th of the annual budget, is substantially below that spent by other states in the Entente. However, government expenditures on education are augmented by substantial assistance from private (mission) schools and foreign aid agencies. And education has been one of the fastest growing components in the budget. The educational sector will probably meet increasing competition for government funds from other priority growth sectors of the economy.

Illiteracy among adults is still over 90 percent and positions requiring professional qualifications are often filled by foreigners. However, the rate of primary school attendance rose during the first development plan period (36 to 41 percent of the children between 5-14 years of age) and is now

considerably above the average for Western Africa (32 percent). At the secondary level there are 63 schools which increased the number of "BEPC's" awarded (the post-10th grade certificate following an examination), from 573 in 1965 to 820 in 1969 and then to 1,844 in 1970; and the number of high school diplomas (Bacheliers) advanced from 161 in 1965 to 253 in 1970, a greater advance than anticipated. In 1970/71 secondary school enrollment stood at 22,787 and was expected to hit nearly 60,000 by 1973/74. In terms of post-secondary education, GOT has created the National University of Benin to prepare the nation's superior cadre personnel and Institute Universitaire de Technologie to prepare the middle cadre personnel.

The problems which the educational sector continues to have are common to other nations in West Africa suffering from the usual shortcomings of an imported system. Teaching content is poorly related to Togo's economic and social conditions, and, more specifically, to the bulk of the students who are and must remain rural. The classrooms are overcrowded, the teachers are often unqualified, and the drop-out and repeater rates are high. (See Tables I-III) In addition, there are severe inequities in terms of access to education: There are many more men than women (for 1972/73 there were 93,565 girls in primary but 196,787 boys, and in secondary 6,456 girls to 21,864 boys). There are proportionately many more in the cities than in the rural areas who are able to attend schools. There are severe differences in the percentage of students in school between the Coastal and Savannah regions. In fact, the enrollment rates descend in geographical progression from the Atlantic Coast to the North: the enrollment rate in the Maritime Region is 53.9 percent, in the Plateaux Region 47.5 percent, in the Central Region 38.9 percent and in the Savannah Region 19.5 percent. Among the municipalities Lome is highest with 83.3 percent while Dapango in the far north is lowest with 17.2 percent. The educationally privileged living in the south are also the two tribal groups which dominate the national bureaucracy and commerce--the Ewe and the Mina. While there are 18 major ethnic groups in Togo, the most important in the north are the Cabrai, of which the President is a member and their language may soon become the official indigenous language for the northern region. One of the elements in the contemplated educational reform would be the introduction of instruction in indigenous (vehicular) languages (instead of French) during the first three years of primary school. The language of the Cabrai tribe (Cabrille) might then become the major language of instruction in the North, while the Ewe and/or Mina tribal languages would prevail in the South. Such a policy decision would require that substantial human and material resources be committed to preparing the rather extensive teaching materials in Cabrille which the northern schools would need.

During the 1971/75 planning period, the GOT set aside 7,000,000 CFA to undertake experimentation in the schools related to anticipated reforms. The experimentation focused on the establishment of 120 half-time classes to determine how effective this might be as an alternative to the present classroom situation where there are up to 100 pupils per teacher. In the experiment classes there would be at most 35 students per class in the first two grades,

30 in the 3rd grade, and 25 in the 4th,5th, and 6th grades. Theoretical and classical education classes would be given during the morning and practical education during the afternoon. While one group was in class the other would be doing the practical work and vice-versa. The system would require double the number of classroom instructors (a total of 240 for the experiment). Furthermore,the instructors would, in addition to their regular teacher-training experience, have to have "multi-purpose" (polyvalent) training so as to be qualified to teach their students during the practical sessions. How this educational experiment has worked out has not yet been announced, but the aim was to get the "office" orientation out of education.

Meanwhile, the Direction de la Planification de l'Education of the Ministry of National Education conducted and published a study on the "causes" of school wastage in Togo which identified the impact of biological and sociological factors (including financial considerations). This study, done on a fairly good sample basis, was published in 1972. The report is interesting, especially in view of the tribal and geographical differences identified, but it contains no real surprises.

What has been interesting in the approach to educational reform in Togo has been the GOT's willingness to undertake experimentation and pilot project efforts in order to establish guidelines for their anticipated reforms. Togolese officials almost uniformly expressed interest in having teachers more inquiry-oriented, involving parents and local leaders in the formal educational system, establishing school gardens and giving manual labor equal emphasis and rewards with intellectual performance. What has not yet been determined is how these general objectives are to be achieved and how much help the educational experimentation to date has been in establishing guidelines for realizing these objectives.

Recommendation: It is anticipated that during the next year Togo, too, will undertake a major educational reform. It was implied that the reform is already broadly outlined, but the GOT is still not prepared to announce it. This announcement may be delayed until the mesh between the educational structure and the new policy of "Authenticity" (following the Mobutu model) is restored. Togolese educational officials think that the educational reforms will be "pilot school tested" before being extended throughout the country.

If this "scientific" approach is in fact taken, and perhaps even if it is not, the country will need to have qualified people to evaluate and direct the effort. As in the case of Dahomey, AID might wish to consider providing limited expertise to assist the GOT in this effort. AID may also wish to consider the provision of training the U.S. for Togolese who would move into positions of responsibility in educational evaluation, curriculum design, and planning after finishing studies in the U.S. AID may also find it possible to work out a program with the Peace Corps (a) to provide PCV's with training in new(cont.,p.F-28)

Table I

Average Annual Percentage Rates of Primary School Promotions, Drop-outs, and Repeaters for Academic Years 1968-69 to 1973-74.

	CP1 to CP2 (1st)	CP2 to CE1 (2nd)	CE1 to CE2 (3rd)	CE2 to CM1 (4th)	CM1 to CM2 (5th)	CM2 to CEPE (6th)
Promotions	47.2	67.7	61.6	70.0	61.0	28.2
Repeaters	44.6	29.0	32.8	26.7	34.5	49.8
Drop-outs	8.2	3.3	5.6	3.3	4.5	22.4

Table II

Average Annual Rates of 1st Cycle Secondary School Promotions, Drop-outs, and Repeaters During Academic Years 1968-69 to 1973-74.

	6th to 5th (7th)	5th to 4th (8th)	4th to 3rd (9th)	3rd to BEPC (10th)
Promotions	72%	76.8%	73.0%	44.-%
Repeaters	18%	16.6%	18.4%	30.-%
Drop-outs	10%	6.6%	8.6%	26.-%

Table III

Average Annual Rates of 2nd Cycle Secondary School Promotions, Drop-outs, and Repeaters for Academic Years 1968-69 to 1973-74.

	2nd to 1st (11th)	1st to Term. (12th)	Term. to Bac.
Promotions	67.7%	50.0%	58.4%
Repeaters	17.6%	30.0%	25.2%
Drop-outs	14.7%	20.0%	16.4%

educational teaching methods (inquiry-oriented), (b) to provide them with the necessary materials for classroom and practical experiences, and (c) to assist with the development of a truly integrated classroom and practical experience approach. This program would assist GOT pilot schools to address the needs and goals Togolese officials have identified. If the Peace Corps could provide the personnel, AID might provide special training for these personnel plus the necessary materials and a special evaluation component. It is not anticipated that this would be a costly effort or that it would involve many non-Peace Corps personnel.

Comment: Togo, unlike many countries following the French educational model, has not really developed a post-primary educational component which provides students with skilled to semi-skilled vocational training. Togo does have Technical and Professional Education at the secondary level; but this training is relatively unimportant (enrollment in 1972/73 was only 2,788), and it is questioned by even the Ministry of Education on the basis of its quality, as well as its quantity. The value of this education may be questioned even more seriously, on the extent to which its graduates are used (and are prepared) to satisfy the real manpower needs of the country.

A critical problem in Togo appears to be the failure (1) to recapture and redirect the wastage of the formal education system and (2) to try to provide meaningful, functional, education/training for adults. The prospects for any meaningful intervention in these areas by any outside donor are further complicated by the fact that apparently "animation" in Togo is increasingly being politicized--that is, the government is using elements of the extension program to generate and promote political support for the party. It should be determined, but was not during the short period the DAP team was in Togo, which types of extension work are being politicized. It appears that the politically oriented animation is being undertaken under the auspices of the Ministry of Social Affairs and that there is a major expansion of that ministry's activities underway (five centres regionaux bien-etre, 13 centres sociaux de circonscription, nine centres sociaux de Poste Administratif and five centres sociaux de quartier). In addition, the Ministry of Social Affairs is responsible for a functional literacy program which seeks to teach literacy to at least 57,000 adults during the second five year plan. The ways in which these programs will fit into those conducted under the auspices of the Ministry of Education should be carefully examined before any activities are undertaken in the non-formal education sector.

II. Practically-Oriented Agricultural Education

Based on the findings of the First Five Year Plan and the planning done and in progress for the second and third plans, the GOT has projected annual rural development manpower needs from 1976 through 1980 as being as high as 50 persons per year at the lowest level (cadres de base or agents permanents--considered D level in some Francophone countries), and roughly 15 per year at the next two higher levels (C level--subordinate cadre or technical assistant engineers).

These projected manpower requirements through the Third Five Year Plan are based on the fact that 85 percent of the population will continue to be living in rural areas and that agricultural training requires rather extensive cadres to provide the level of technical assistance which the farmers need. The agents who would engage in basic extension work are the encadreurs (agricultural extension agents) and they are trained by responsible instructors of the regional development agencies (Societes Regionales d'Amenagement et de Developpement--SORAD's). This type of training is progressive in the sense that the encadreur is expected to (and apparently can) improve his training step by step during the execution and development of agricultural projects. The facilities for training these personnel are: (1) 16 multipurpose (polyvalent) centers, (2) the center of Tchitchao (in the north near Lama-Kara), and (3) the center of Tove (about 15 miles north of Lome). Major model program development activities will in the future be undertaken in Tove. It is unknown how effective these training programs are.

With regard to the training of youth, and especially addressing the rural exodus and the potential problems which that creates for the government, two major approaches are being considered: (1) the installation of village cooperatives, and (2) the creation of youth clubs in rural areas. The task of undertaking these programs has been assigned to the Service de la Jeunesse Pionniere Agricole (JPA), in the Ministry of Rural Economy. (Whether or not this group is being politicized is unknown.) During the Second Plan the goal has been to train the youth without displacing them from the traditional milieu.

The youth club members are between 17 to 20 years old and engage in the exploitation of land put at their disposal by local authorities. They work together with technical and material assistance provided through the JPA's during the first three years. Income from part of the produce harvested each year is to be deposited in a reserve fund. At the end of three years each club could become a mutual cooperative (mutuelle), be well-organized, have trained human resources, and could then be transferred to the technical assistance program of the SORAD which would integrate it into regional programs. It was anticipated that during the Second Five Year Plan 19 old clubs would be provided with the basic materials and the technical assistance they required, and 25 new clubs would be founded. At the end of 1975 there would be a total of 44 clubs fully operationalized and capable of testing this rural development model.

How these programs have developed during the Second Five Year Plan period (1971-1975) is not known, but in addition to the establishment of the JPA clubs and their conversion into cooperatives there is the factor of their being successful following their integration into SORAD regional development programs. There were indications in Togo that the SORAD's were not in fact functioning as effectively as had been anticipated and that they were subsequently getting partially displaced by the establishment of more vertical agencies which were crop or product-oriented (e.g., SOMACO in Dahomey, UNCC in Niger). Even if the

clubs and the cooperatives evolve successfully the premature phasing-out of support by the special JPA program could cause the clubs to disintegrate if the SORAD's do not have the necessary managerial, financial, and technical support required.

Comment: It is recommended if GOT and AID find they have mutual interests in this area on non-formal education/training that AID carefully analyze what has been accomplished during the Second Five Year Plan and determine why there have been successes or failures. The Togo approach is very close to the 4-D scheme being tried in Dahomey and it is rather close to Upper Volta's 4-C's program. The ultimate potential of or prospects for this effort in Togo may provide information and recommendations of value not only for Togo but for Dahomey and Upper Volta as well.

The effectiveness of interventions by SORAD's or product-related agencies should also be carefully evaluated. If AID were willing to support a pilot project effort to help determine and develop the viability of this model, the same procedure might be followed as was recommended in the case of Dahomey: ascertain that the counterpart institutions are not primarily politically - oriented, work in the northern part of the country with PCV support, co-ordinate efforts with the oncho control program, and make the local institutions as self-reliant as possible so that subsequent inefficiencies on the part of either the SORAD's or other agencies will not destroy the rural development projects.

Experimentation des Centres d'Enseignment Pratique

(Experimental Centres of Practical Education): Under the Second Five Year Plan, Togo has designed these centers to train students who cannot handle secondary studies. Where the centers are established will determine the kinds of activities they will undertake--be it livestock training, plantation crop production, or handicrafts-- like the first Centre Artisanal established at Palime. In all cases, and regardless of location, basic notions of agriculture are to be included in the programs. Experimental gardens and fields are supposed to permit the students to appreciate the importance of the role of new agricultural methods for increasing production and income. The results of this experimental program are to determine the eventual generalization of this type of education nationwide.

Again, it was not possible for the DAP team to ascertain the degree of success achieved by this effort during the first 4 years of the Second Five Year Plan. This model should be evaluated by AID if there is any interest in a mutual GOT/AID rural development effort. The program may be an interesting model for generalization provided that is in fact offering the kinds of skills the farmers need and the rural economy requires. If these objectives are not being achieved, the centers may not be too different from the first results achieved in the CER's in Upper Volta except that those in

the Togo centers would have already completed primary school. The potential flexibility, if it actually exists in practice, of the Togolese centers may make this a rural development model worth considering and certainly worth evaluating.

III. Non-Formal Education

In Togo there is very little attention given (a) to non-formal education for adults; (b) to education for children who have been to school and have failed to achieve permanent literacy(for example, it has been estimated that during the 1974/75 to 1980/81 period there will be 127,605 who drop out before having completing the 4th grade and who will, consequently, revert to illiteracy); and (c) for children (presently about 46 percent of school age population) who are not able to enter school. It would appear that the fastest way Togo could begin to reach this population would be through an oral, demonstration-based approach. A major instrument for this purpose would be radio.

At the beginning of the Second Five Year Plan, Radio-Lome had 4 transmitters: 1 of 100kw, short wave; 1 of 4kw, short wave; 1 of 1kw medium wave, and 1 of 20kw medium wave. The second plan called for (1) the installation of two new transmitters to cover the country and to improve reception, one of 100kw and the other of 10kw; (2) a study of the cost of installing television; and (3) the establishment of radio-clubs throughout the country. The purpose behind the establishment of radio clubs were: to make more information available to the people, to give a new impulse to learning and literacy, and to improve the general level of education and animation of the rural masses. The funds allocated for radio improvements in the plan were 725,000,000 CFA, of which 15,000,000 CFA were to be for the radio clubs. While it appears that the construction and equipment portions of the plan have been implemented, no information was obtained on the status or results of the expenditure on the radio clubs.

In conjunction with this input into radio, there was to be established a popular newspaper which the GOT would subsidize under the management of Editogo. The extent to which this paper serves general educational purposes or is coordinated with radio education is not known either.

Both the journal and radio are under the direction of the Ministry of Information, perhaps the most politicized ministry in the government. In view of this, it may not be desired nor desirable to consider any foreign intervention through these media channels in support of rural education and rural development efforts. However, if there is interest in reaching the rural population through any joint GOT/AID project, the infrastructure appears to exist if there could be agreement on the use of these facilities for educational purposes.

Recommendation: It may be possible to provide meaningful assistance to radio education in Togo through a multi-national (perhaps under the auspices of the Entente) radio education project. All of the Entente countries (perhaps with the exception of the Ivory Coast which is more ITV oriented) feel that radio education is presently helpful but has the potential for making a much greater contribution to rural development. While there are differences in the approaches each country is taking in the development of a radio education capability, there are also substantial similarities, and it would appear that a sharing of techniques, materials, and research findings may be economical in both human and material resources terms. The fact that the Ivory Coast might not be as interested in view of its commitment to ITV might also erase some of the concern other Entente members might have of Ivorian domination of such a joint effort. On the other hand, it might also be possible to have a regional radio project ouside of the Entente umbrella. Whatever the opportunities may be to accomplish these exchanges, a regional training project for radio personnel would appear to have good prospects after the various countries resolved their present questions about the long-term use of radio for development.

If a regional approach appears impossible to accomplish, then it would seem that the only way in which an AID input might be made in Togo's radio education (assuming that Togo is interested) would be if some unpoliticized committee were appointed to oversee the radio education activities (as differentiated from indoctrination efforts) or if a ministry which had not been fundamentally politicized were to be responsible for radio education broadcasts.

General Comment: The economic situation in Togo, while not up to Ivory Coast standards, is certainly much healthier than one finds in Dahomey, Niger and Upper Volta. As the Ambassador pointed out, the budget of Togo is in a good position to support development if the decision is made to do so. Togo has the added advantage of receiving about 70 percent of its development aid from abroad--FAC, FED, and Germany.

In the education and human resources development sector the country has made impressive gains in terms of school enrollments--by the end of the Second Five Year Plan they should have 54 percent of the primary school aged children enrolled. However, it also appears that with present financial resources, they are reaching a plateau regarding the extent to which they can continue the present rate of enrollment increase. Consequently they are becoming concerned that the education being provided is not productive and may be counter-productive in rural development terms. At this point they are seeking new models and approaches to try to solve these education/human resources problems, to reach the bulk of the population who are in rural areas, and to find rational, tested, solutions for doing so. The models they have been developing need evaluation, and carefully controlled and evaluated pilot projects are needed to assist in analyzing and developing new models. In such a small,

relatively progressive and open country, AID might be able to provide substantial assistance at a relatively low cost by providing the expertise needed in these experimental and evaluation areas and by providing training for Togolese.

Furthermore, the Peace Corps presence in Togo is fairly pervasive--the kind of impact they can have is illustrated by the fact that during the last four years PVC's have built more classrooms than the GOT, and they did so at a cheaper cost. That kind of presence built into rural development models could make a substantial technical assistance contribution. AID has generally been wary of projects which have had a high technical assistance component in francophone Africa because of difficulties which have historically been encountered in finding qualified French-speaking Americans to man the projects. However, through cooperation with the Peace Corps this factor need not be the inhibitor it once was, and AID programming should keep this option in mind, if not for active PCV's then for former PCV's who have the linguistics skills required, plus a knowledge of and concern for these countries.

TOGO
HEALTH SECTOR ASSESSMENT

1. Major Health Problems

The major health problems of Togo are malaria, trypanosomiasis (especially in the north in the Bassari basin), yaws (which in spite of an earlier eradication campaign is still common among the Komkomba tribe and among the Cabraia with a focus around Pagouda), onchocerciasis (which is still very prevalent along the Oti and Mono rivers), cerebrospinal meningitis (which occurs in occasional epidemics), and malnutrition (which is extremely common in all areas, but especially in the north).

2. Health Infrastructure

Central Level: The Minister of Health deals largely with general policy decisions. The Director General is in charge of planning, administration and management. The Ministry is divided into eight divisions: Epidemiology, Basic Medical Services, Public Health and Health Promotion, Mother and Child Health, Laboratories, Pharmacies, and Training.

Regional Level: The 1971-1975 plan called for complete decentralization of health services with the creation of regional health administration which would be fully responsible for all regional health problems, participate in the national health planning process and represent the Director General locally. Five regional health departments are contemplated: Region Maritime, Region des Plateaux, Region Centrale, Region de la Kara, and Region des Savanes. So far, the decentralization plan has not been implemented, however. There are regional hospitals offering a total of 1,770 beds in 1972. They were modernized in 1972 with the help of FAC. All of these have services for general medicine, pediatrics, general surgery, maternity and communicable disease. Each is flanked by an outpatient department inclusive of an MCH (material and child health) center.

Local Level: This coincides with the circonscription administrative. They are called subdivisions sanitaires and number 19, each of which has a chief physician responsible for all peripheral services and a health center hospital in the main town of the circonscription. In 1972 there were 11 such hospitals with a total of 995 beds. They have wards for general medicine, pediatrics, maternity, and isolation for communicable diseases, but no major surgery.

Peripheral Level: At this level there are primary and secondary health centers and MCH posts. Primary health centers are actually small rural hospitals with 25-40 beds for maternity and light illnesses. Each has an out-patient service, a laboratory, a pharmacy, an environmental sanitation service and an MCH center. Health education is undertaken with emphasis on nutrition, vaccinations and home visits.

Secondary health centers are the village dispensaries of old, reorganized to supply minimal curative care and prevention. There are said to be 190 of these, each including 2-4 maternity beds. They are intended to provide health education with emphasis on nutrition.

Maternal and child health posts are run by assistant midwives and are located especially in hard-to-reach mountainous areas. In 1972 there were about 37.

The peripheral services constitute the basic health services grouped around the health center hospital of the subdivision which serves as referral. There is a pilot zone at Vogan which proved too expensive to serve its purpose.

The two most important laboratories in Togo are the University Hospital Center (dealing exclusively with diagnostic laboratory work) and the National Institute of Hygiene. The latter is a German project which until recently had four German physicians, but now only one is left as Director. He will be leaving in a year's time and the laboratories will then be run by Togolese nationals. This is the public health laboratory for the whole country. It is equipped to handle bacteriology, serology, biochemistry, parasitology, etc. It is also the reference laboratory for all other laboratories.

Pharmaceutical products are distributed in Togo under two different systems: "free medical assistance" throughout the health service network; and direct sale to the sick, particularly through a national office (Togopharma) as well as through private pharmacies. The central medical stores pharmacy serves the hospital and peripheral institutions with medical supplies and equipment. (More than CFA 90 million worth was distributed to the institutions in 1971, equivalent to only $328,978). Togopharma has opened 26 pharmaceutical stores and two state pharmacies.

3. Personnel Availability

While the DAP consultant could not obtain specific information on the number of health personnel now in operation, the plans for training exist. There is some information, however, on the number of health workers operating outside the cadres of the Ministry of Health.

The training of physicians in Togo is, however, unwise, and appears to be an extreme and unsatisfactory answer to the alternative of training Togolese in France or the U.S. This reviewer agrees that sending out of the region potential talent to receive medical education is wrong for many reasons. It seems that the training of Togolese medical students could very successfully be carried out in either Dakar, Abidjan or Yaounde where the health problems are by and large similar.

While the plan as a whole makes sense on paper, it is difficult to comment on the adequacy of this plan at the present stage of development. While the decentralization of health services in a country which is both small and diversified like Togo is logical, the time lag required to implement the program cannot at this time be adequately estimated.

The Togo Medical School was established in 1970. It had been estimated that Togo would have one physician per 40000 inhabitants in 1974 and it was also becoming increasingly difficult to send students to the medical school in Abidjan and Dakar. The students returning from France found themselves faced with problems they had not been trained to handle. These are some of the same arguments used by the Government of Niger to defend the setting up of a national medical school. While the arguments no doubt are valid, it is difficult to see how these countries will be able to meet the financial and technical demands of modern medical schools. There can, unfortunately, be little doubt that there will in the future be even less money for supplies and equipment--and even less services for the rural population.

At the present time the first 'cycle' (2 years) is being given, dealing with pre-medical work (chemistry, physics, etc.).

Sixty-five students were admitted to the first year class. About half are being continued into the second year. It is the intention to utilize the first year to evaluate the students. About 30-35 are expected to be found suitable for continuation of medical studies. The rest will gointo para medical training. At the moment the Centre Hospitalier Universitaire, a 700-bed hospital, is to be used for clinical training. Plans have been made, however, for an ambitious complex of buildings to house the medical school and a 600-bed University Hospital.

4. Summary of Sectoral Constraints

The Government feels that its greatest constraint is lack of medical and paramedical personnel. Lack of transport facilities (notwithstanding a fairly well-developed road network) is also a drawback as is the obvious lack of materials and medical supplies. A major constraint to the development of a low-cost health delivery system for the rural area is the Government's own apparent preference for an ambitious building program.

5. Government Plans and Priorities in Health

The First Five Year Plan covered the years 1966-1970 and was largely concerned with setting up a basic infrastructure which then was to be improved by the Second Development Plan 1971-75.

The First Plan (health sector) envisaged regional hospitals, sub-division hospitals (circonscription medicale), peripheral health centers, dispensaries, and pharmacies. A very considerable effort was made during this plan period to realize the infrastructure outlined. Regional hospitals were constructed or were being constructed at the beginning of the second period as were health centers and dispensaries, but environmental hygiene left much to be desired. Both plans are based on the priority to bring modern medicine to the rural masses. This is to be done through strengthening the basic infrastructure, enlarging the coverage to places not as yet covered, training additional personnel and fighting against communicable diseases.

The Second Plan calls for strengthening the national hospital center; creating 14 health center hospitals at the circonscription medicale level; building 9 primary health centers; tranforming 50 rural dispensaries into secondary health centers; creating 15 new secondary health centers.

The total cost of this is calculated at CFA 1,171,025 over the 5 year period. The development of the health network will also need increased transport facilities to a value of approximately CFA 70 million with maintenance costs of about CFA 66.1 million. The need for additional personnel and the recurrent expenditures calculated for the development of the health network are estimated at CFA 653 million for the 5 year period.

The following Table indicates the health investment programs for the period 1971-1975:

Table
Health Programs - Togo 1971-1975
(in CFA millions)

Program	Investment	Recurrent Exp
Development of Infrastructure	1,171.025	652.00
Health Education	4.7	6.299
Maternity and Child Welfare	169.004	
Environmental Sanitation	299.39	
Communicable Diseases	173.99	424.1
Development of Laboratories	70.00	70.5972
Distribution of Materials and Pharmaceutical Products	113.00	79.1
Training of Personnel	221.00	390.768
GRAND TOTAL	2,222.109	1,622.8642

The major health policy calls for complete decentralization of the health services with creation of regional health administrations responsible for all regional health problems. It will require the following activities:

-The training of more physicians, including specialists.
-The training of nurses, with a target of 700 state nurses by 1978.
-Training of all other types of paramedical personnel.
-Construction and/or improvement of regional hospitals and hospital health centers at the arrondissement level.

6. Evaluation of Government Plans

The announced policy of development of rural health services is hardly borne out by the Government's declared priority of training more high level personnel and building more institutions as shown above. The Government's main emphasis appears to be the enlargement and improvement of the infrastructure which we feel is already over-developed compared to the level of personnel available and needed, and the amount of material, equipment, and medical supplies to make it function efficiently. As in all likelihood those items that are available will go first to the higher levels, services to the rural areas will be a long time in coming.

7. External Assistance

The most important donor in the health sector appears to be WHO. One of its most important programs has been "The Development of Basic Health Services". The objectives of this project have been to continue the program of development of health services started in the pilot zone Vogan in 1964. The idea of this program was that it should be a pilot program to be extended to the rest of the country, allowing for a rational and complete coverage of the total population with curative and preventive medicine. While the Vogan area is being kept as a training area offering practical training for all types of personnel, it is understood that it might be somewhat too elaborate to be a pilot zone since economically such services could not be established on a sufficiently broad scale. It has therefore been decided to establish another pilot area in the subdivision Lama-Kara in the north, which at the same time will participate in the UNDP agricultural program.

The WHO program includes the development of environmental sanitation and support for curative institutions. It is closely connected with the malaria control program which it actually derives from as a pre-eradication program. A very considerable geographical,demographic survey has been carried out together with a detailed inventory of all health institutions and services.

The WHO Regional Training Center in Lome provided a special course in public health for 19 Togolese physicians in 1971 to prepare Togolese physicians for responsibilities in the field of public health when assigned to positions out-

side the capital. The center has also trained Togolese laboratory assistants at what has been called level B. This means 3 years training (theoretical and practical) for students with 4 years of secondary schooling. The rather long training period is necessary to obtain the needed civil services status.

8. Possibilities for AID Intervention

As a former Trust Territory, Togo has received more aid than it can absorb. Moreover, the recent development of phosphate deposits (expected to bring an income of $150 million per year)gives Togo the possibility of supporting some of its more ambitious programs from domestic resources. Therefore, AID should be cautious about initiating new projects in Togo.

TOGO
Nutrition Profile

Population:

Total: 1.8 million
Growth rate: 2.7 percent (8.2 percent in urban areas)
Rural population: 83.5 percent of total
Major Tribes:
- Mobas (55,000)-northern savanna
- Gourmas (69,000) - northern savanna
- Cabrais (180,000) - located on the massif abutting the Atacora range, they are talented farmers. Due to population pressure many have migrated to central Togo, to the cocoa plantations of the south and to Ghana
- Lossos - central Togo
- Ewes (200,000) - savanna southwest of Kpeles Range between the Volta and Mono rivers; engaged in fishing, coffee and cocoa cultivation
- Ouatchis - coastal zone; fishermen, cultivators of coconut palms, corn, manioc

Agriculture

Major crops:

Sorghum and millet	130,000	tons in 1971
Rice	22,000	
Corn	100,000	
Manioc	1,100,000	
Sweet potatoes and yams	1,100,000	
Pulses	27,000	
Peanuts	18,000	
Cottonseed	12,000	

Millet and sorghum are grown in the savanna north of the Atacora Range between Lama-Kara and Dapango. Rice is produced throughout the country but in small amounts. Until recently rice and corn were milled by hand, yielding a more nutritious product than if milled mechanically. Manioc is grown universally as are sweet potatoes and yams. Pulses of some sort are found throughout the country but the voandzou bean is a product of the north. Peanuts are both a food and a cash crop while cottonseed is grown strictly for commercial purposes. Lack of capital investment, poor soil and inadequate management of scarce water resources have hampered crop production in general.

Livestock and Poultry:

Cattle	190,000	head in 1970/71
Sheep	570,000	
Goats	580,000	
Hogs	224,000	
Poultry	1,900.000	

The extension of cropland is reducing pastureland. As elsewhere in the region, cattle are not raised for their meat, although some slaughtering does take place. Chickens are the most common animal slaughtered for meat. Sheep and hogs are also raised for meat purposes.

General:

The Government is anxious to reduce dependence on cash crops. Agricultural policies are aimed at improving the soils and educating farmers to use better techniques.

Storage:

Even in normal times, Togo's food supply lacks elasticity due to inadequate facilities and practices.

Fisheries

Commercial fishing is practiced on Lake Togo and in the coastal waters as far as 16 miles out. A new German-financed deepwater port has been constructed a few miles east of Lome. Other German assistance has expanded cold storage, smoking, drying and related facilities. There has been some attempt to encourage the development of freshwater ponds on a small scale.

Seasonal Availability of Foods

July is the beginning of the harvest calendar when corn and millet ripen. Upland rice is harvested in August and September and swamp rice from October to January. Late millet ripens in September and sweet potatoes become available in October. November and December see the gathering of sorghum. A seoond corn crop is harvested in December and a second sweet potato crop in February. During April, May and June food supplies are scarce and manioc becomes the staple.

Diets

Two basic types of diets can be identified in Togo: The sudanian type in the north in which grains and legumes predominate; and the guinean type in the south in which roots and corn predominate. Tribal diets are all deficient except for that of the Cabrais of the central region. The intake of animal protein through the consumption of meat is highest in the center of Togo because of the availability of game. The consumption of fish, which is important in the south, quickly decreases as one moves north away from the sea. The present attempt to create a fishing industry in Togo may change this trend and it is conceivable that with a rise in the standard of living, canned fish may reach the population of central and northern Togo. As a result of the low consumption of animal proteins and the reliance on cereals for vegetable

proteins, the diets are deficient in essential amino acids, especially methionine and lysine among millet eaters and tryptophane among the corn eaters. In summary, it could be considered that in the north the intake of energy-producing food and that of protein falls short of the recommended requirements. In the south, energy-producing foods are consumed in adequate quantities but the protein intake is inadequate, with methionine the limiting amino acid in 13 of 15 studies, and lysine and tryptophane in two. It has also been shown that almost all vitamins, except perhaps thiamine, are under-consumed in one or another of the tribal groups. There is also a noted deficiency in calcium. The only mineral consumed in ample amounts is iron.

Nutrition Programs

The Government of Togo has created a Division of Applied Nutrition within the Ministry of Health and a similar division within the Ministry of Agriculture. Courses in applied nutrition have been introduced in secondary schools. Nutrition education of mothers has been organized to some extent in maternities.

TOGO
POPULATION AND FAMILY PLANNING

Togo has never had an official policy directed towards the limitation of numbers, density, or rate of growth of the population. Policy decisions are made by the President and the Council of Ministers. A national plan comprised of the composit submission, including statistical input, from each sector is prepared on a 5-year basis. The current plan (1971-75) contains one section on "The Demographic Problems of Development" which notes that Togo's population will increase by 234,000 (at 2.7 percent annual growth rate) in the time period of the plan, leading to problems in employment and education. Recommended solutions to these problems, however, are limited to responsive-type actions, i.e., creation of more jobs, development of the educational infrastructure. In spite of recognition by the Plan that the rate of population growth might be increasing, comsideration of population-influencing policies is not evident in official planning documents.

The first national "sample census" was carried out in 1958-60, followed by a demographic sample survey in 1961. A second census was completed in 1970 under the African Census Program and the preliminary results are now being cited in official documents. The demographic follow-up survey which would verify the 1970 figures has not been processed and therefore 1961 rates are still being applied.

The Director of the National Institute of Research located within the highly politicized Ministry of Youth Affairs has held discussions with representatives of the University of North Carolina Population Center regarding the possible establishment of a population analysis division for the Institute which would, in cooperation with the Ministry of Planning and the demographic department of the University of Benin, provide analysis of demographic data for planning purposes. The Director has expressed interest in the development of a demographic socio-economic model for application in directing the government towards a national policy.

In 1970, 73,000 Togolese were forcibly repatriated to their native land from Ghana,along with numerous peoples from other West African states. The Togolese refugees were returned to the region of their origin and the greater part of the foreigners were expelled. Normally the government accepts immigration without restriction, although the lack of employment opportunities in Togo is believed to hold the numbers to a minimum. Emigration is also unrestricted and many qualified Togolese have left their country for opportunities in France and West Africa. The number of outmigrants, however, is unknown: government estimates are based solely on passport applications. At present, there is little interest in determining the magnitude of either emigration or immigration. Forced internal migration to supply manpower resources for railway maintenance and plantations was practiced under both the German and the French colonial governments. Approximately 13 percent of the population is urban with urbanization increasing at a rate of 5 percent annum. The government has adopted a policy favoring

rural development in an attempt to slow the exodus toward the cities, claiming that one-fourth of the country is underpopulated and underdeveloped.

A civil registration system was introduced in 1921 and remains imcomplete, even in Lome. The hospital registration system accounted for 10,010 births and 997 deaths in 1967. Statistics used by the Ministry of Health are still based on the 1961 sample results, which give a crude birth rate of 55 and crude death rate of 29. Infant mortality is estimated at 120/000 and approximately 50 percent die before the age of 5 years.

The 1920 French law prohibiting birth control and abortion remains unchanged in Togo, but contraceptives are available through government and private pharmacies. Orals are sold only under prescription. An estimated 8-9,000 IUDs are inserted annually by private physicians. Although birth control is included in the curriculum pf paramedical personnel both in government schools and the regional WHO Training Center in Lome, family planning services are not officially provided through government facilities. An attempt to develop a family planning center in conjunction with government maternal and child health services in Lome was rejected by the Ministry of Health, although it had been enthusiastically supported by the MCH Division. Peace Corps volunteers teaching health education in MOH dispersaries have been prohibited by the government from initiating discussions on family planning, although they are allowed to respond to inquiries and to refer patients to medical personnel. A private family planning organization is being formed and an IPPF-sponsored family planning conference in coordination with this group is planned to take place in Lome in mid-January 1975.

A Knowledge, Attitudes and Practices survey was conducted in villages of Togo's Maritime Region in 1969. The results of this survey indicated that women fully recognized the need for child-spacing and ideally prefer an interval of 3 years between births. Their reasons not only include their concern for the health of the mother and the child, but economical motivation as well. The difference between the ideal and the practice, however, was largely governed by a universal lack of knowledge about modern contraceptive techniques. The predominant method in use was abstinence and a desire for information on birth control and contraceptive services was indicated. In spite of traditional, moral, and religious sanctions against abortion, 26 percent of those interviewed indicated under certain conditions, social pressures could cause people to seek an abortion, and 52 percent believed that the incidence of abortion was rising.

Conclusions and Recommendations

The government has yet to define a demographic policy. Although there has been some concern for the impact of rapid population growth on certain sectoral objectives, the government lacks the technology to apply that data which is now being generated to the general development perspective. The National Institute of Research of the Ministry of Youth Affairs offers a potential inroad into the national planning system, acting as a bridge between the University of Benin and the Government. Serving as the Togolese center for applied

social science research, it has the advantage of having at its disposal the academic resources of the University, while having a bureaucratic standing in a ministry where great emphasis is being placed on the future. The research capabilities of the Institute are an unknown factor and should be more firmly established before any large-scale commitment is made; but for the immediate future, the potential of this Institution as a national, and perhaps eventually francophone regional population dynamics research center, should be explored.

The Ministry of Health recognizes the need for education and information on child-spacing and family planning, but an official venture into the provision of contraceptive services will depend on evidence of a public demand. This essential explains the paradox between the government's previous request for assistance in the creation of an information, education and training center and their recent rejection of a services-oriented program which would have required official authorization. The family planning orientation provided through the WHO regional training center program is limited and theoretical. At present no facility exists for clinical experience. The establishment of a center in Lome would therefore be desirable for both local and regional implications. If a private organization is authorized, it could perhaps fill this need if the government continues to maintain its attitude toward acting as a referral agent and if WHO would agree to cooperate with a private group. Bilateral assistance for the objective of family planning is considered by the present Health Ministry as "interference" in government affairs.

TOGO
ECONOMIC DEVELOPMENT OF ONCHOCERCIASIS-FREE ZONES

Date Spraying Begins: October 1976
Date Resettlement Begins: April 1978

I. Onchocerciasis Vector Control Program Area

Although onchocerciasis is found all over Togo the area to be included in the control program comprises only the northern regions of Savanes and La Kara. Approximately 400,000 people or 20 percent of Togo's population live in this area. The area is sparsely populated with the exception of major concentrations around Lama Kara and Dapongo (70-100 inhabitants/km^2). Although approximately 50 percent of the cultivable land in Togo is unused at present, several limited zones such as those near Dapongo and Lama Kara show the effects of over-cropping (soil erosion, declining yields). Spontaneous migration from such areas to other land-abundant rural areas has not been common in Togo due largely to a limited transportation network and traditional land rights. Substantial migration to urban areas, especially in the South, does occur, and between 1960-1970 12,300 and 16,000 people migrated south from the Savanes and La Kara regions, respectively. Northern Togo suffers from low, unevenly distributed rainfall and due in part to the absence of major government development programs, agricultural production has not kept pace with national population growth. Substantial malnutrition exists, especially in the "hungry season" before harvesting. The Savanes region is, however, quite well suited to livestock development and 37 percent of Togo's cattle (72,400 head) are located in that Region (2/3 of these are found in the heavily populated Dapongo district).

A number of rivers flow through these northern regions and government development plans place high priority upon water (flood) control and irrigation in these areas. Several studies for hydro-agricultural development of the Oti, Koulougona, Kara, Koumangou and Kenan river valleys have been completed or are presently underway. The valleys would be principally used for production of rice which reportedly is consumed by both rural and urban populations. Increased production of sugar cane, cotton, corn, peanuts, and tobacco is also envisaged.

II. Onchocerciasis-Free Economic Development Zone

The Sansanne-Mango administrative district of the Savanes region was selected by the PAG mission as a zone suitable for a major relocation project. The area comprises the valleys of the lower Koumongou and Silebongo rivers as well as part of the Oti valley situated between its confluence with these two rivers. The project zone could attract settlers from the densely populated Dapongo district to the north.

The project zone lies within the sudanian zone and receives an average rainfall of 1000-1400 mm. during a 7-8 month rainy season. Soil maps of the area have been prepared by FAO/ORSTOM. The best soils are silty loams occupying terraces in the Oti and Koumangou valleys suitable for a range of food crops as well as cotton and tobacco; and soils of the Koumangou series which, with flood control, should also be suitable for a wide range of crops including cotton, maize and vegetables. There are also areas of hydromorphic soils in the main river valleys suitable for irrigated crops, particularly rice. Around 30-40 percent of the soil of the Oti Valley has high potential but a major problem in the development of these best soils will be the control of flooding, which would require considerable capital investment. However, some 30,000 ha. are available for dry-land farming without expensive improvements (the valley of the Koumangou and part of the Oti Valley).

There are two main ethnic groups in the proposed departure region-- the Dapongo district - both fundamentally Gourmantche. In the Sansanne- Mango subregion, three groups, the Tchokossi, Ngan-gan, and Konkomba, predominate. Substantial seasonal migration to the coffee and cocoa zones of southern Ghana occurs from both areas.

Although a primary road passes through both the Sansanne-Mango and Dapongo regions, there are few secondary or tertiary roads. The difficult farming conditions, low level of technical development and undeveloped infrastructure are such that the farming system is almost entirely at a subsistence level and little produce is marketed. Much of what does enter the market circuit goes to Ghana.

Past and Present Development Activities in the Proposed Project Zone

As in other regions, a regional development agency (SORAD) has operated in the Savanes region since 1965 and is responsible for promoting economic and social development of the region and raising the rural standard of living. The Bureau pour le Developpement de la Production Agricole (BDPA), a French technical organization, has provided technical assistance in the region since 1962 with notable success in the adoption of animal traction, groundnut production, use of fertilizers and precooperative development. More recently the regional SORAD administrative structure in Togo has come under attack and a number of vertical societies for production of rice, cotton, cereals, etc., have been created. The third 5-year plan (1976-1980) reportedly will further emasculate the regional SORAD structure and create additional vertical societies.

Two experiments in resettlement are now underway in La Kara region of northern Togo. A small FED project which hopes to settle 600 families was begun in 1974 in the Kara valley and a large UNDP/FAO project will resettle Kabre peoples from exhausted soils of the La Kara region on fertile unoccupied zones of the same region. Basic hydrological, pedological and sociological studies are now being completed and a pilot zone of 5,000 ha. will receive its first settlers in 1975. A study of land tenure systems is being conducted by FAO

and new legislation is foreseen which will facilitate settlement activities. It is likely that the UNDP project, if successful, will later be extended to the Savanes region to the north. However, although the Kabre are willing to move south and east in the La Kara region, they are not expected to move north, to what they consider to be a "poorer" region. Thus the expanded project would encourage movement of the Gourmantche peoples of the Dapongo area south into onchocerciasis free valleys of the Savanes region. Finally a nationwide FED village well construction program will construct 113 wells in the two northern districts and establish a new well construction/maintenance subcenter in Mango.

III. Development Strategy

A. PAG Recommendations

Preliminary social studies indicate that the people in the densely populated areas around Dapongo might be prepared to move permanently to the richer soils of the Oti valley and its tributaries and that sufficient numbers could be forthcoming to exploit the advantages offered by the control program. Since the proposed project zone in the Sansanne-Mango area does not appear to have been the scene of recent (this century) colonization, a settlement rather than a repopulation project would be in order. The PAG report recommended that a project strategy for this zone be deferred until the results of the UNDP/FAO pilot resettlement in La Kara were available. The report assumes that the UNDP would be interested in extending its pilot project, if successful, to the Sansanne-Mango area and conversations with the local UNDP Resident Representative confirm this view. The kind of project to be designed in the Sansanne-Mango area will depend to a large degree upon the need for major works to control flooding in the area. Even without major capital investment for water control and irrigation, approximately 30,000 ha. of land suitable for dry-land farming could be settled in the area, according to FAO/SEDES, absorbing 25-30,000 immigrants from the Dapongo area. With the provision of basic infrastructure (roads, wells, schools, etc.) and an intense extension service network, average family food supply could be increased from below subsistence levels (in the Dapongo area) to give a surplus for sale, and the area could yield significant quantities of rice, cotton and groundnuts for marketing. Assuming half the area is cultivated with cereals or cash crops and the other half left for fallow, annual crop production could be in the order of 14,000 tons of rice and cereals, 2500 tons of groundnuts, 1600 tons of cotton and 14,000 tons of yams. In addition, livestock production could be increased significantly. Total value of production could reach $3.8 M/annum and the incremental margin per family would be approximately $260-320 per annum.

B. Government Development Plans and Progress to Date

Government plans for development of the proposed onchocerciasis free project zone (Sansanne-Mango) will be integrated into plans for the northern regions as a whole which will be outlined in the forthcoming third 5-year Plan (1976-1980). Discussions with officials of the Ministries of Planning and Rural Economy indicate that the government plans to develop the major growth

poles at Dapongo and Lama Kara. This will be accompanied by hydro-agricultural development of river valleys in the north, especially the Oti Valley. There are indications that the government plans rather capital-intensive development of these river valleys, including the proposed onchocerciasis-free project zone. Through the development of these areas the government hopes to decrease emigration to the south and urban centers and harness the development potential of the north. Resettlement activities will probably be directed by a new "Societe" independent of the existing SORAD structure. The government reportedly hopes to stress production of rice, sugar cane, soy, sorghum and vegetables, placing emphasis on production units which are "viable". In addition the government hopes to encourage the exploitation of "bas-fonds" and formation of marketing and consumer pre-cooperatives in newly established villages near the river valleys.

The Togolese government will receive UNDP assistance in conducting basic studies of the onchocerciasis program area (aerial photographing, land use mapping, hydro-geological studies, etc.). Because resettlement in areas affected by onchocerciasis is not recommended until 18 months after spraying begins of April, 1978, Togo can benefit from considerable experience gained from the UNDP/FAO La Kara resettlement activities before finalizing plans for settlement in the Sansanne-Mango area.

IV. Recommended AID Assistance Over The Next Five Years

While Togolese officials expressed considerable interest in AID assistance for developing onchocerciasis regions of the country, present AID policy precludes bilateral grant assistance to Togo in the agriculture and livestock sectors. No AID-assisted regional program (AFDB, Entente Council) is presently structured to enable AID to provide assistance to Togo under their auspices.

Should AID's region/bilateral policy change, there is only limited justification for AID grant assistance to Togo in this sector. Adequate UNDP technical assistance for project planning and initial project management seems assured, eliminating a need for major U.S. technical assistance. Although considerable capital assistance may be needed especially if Togo chooses to build major water control and irrigation works in the Sansanne-Mango area, prior to providing any capital assistance AID should carefully examine the degree to which resettlement projects are designed to develop large "viable" agriculture units rather than small farm agriculture. In addition, given Togo's burgeoning phosphate export revenues, AID should carefully assess Togolese commitment to use these funds for agricultural development in the proposed project zones.

DAHOMEY
MACRO-ECONOMIC ASSESSMENT

I. Overall Performance of the Economy

Widespread border trade with the neighboring countries confuses the determination of basic trends in the economy of Dahomey; nevertheless, official production and trade statistics must be used for such estimates (1) because these are the figures used by the Government itself, (2) because in the Team's visit the Government stressed that the objective and political elements of development assistance cannot be separated, and (3) while the exact numbers are representative only, they are indicative of orders of magnitude.1/

There are no official national accounts statistics for recent years, nor a development plan yet created for the next years, so analysis and projection of the components of national income is subject to conjecture. In 1971 the primary sector accounted for about 33% of GDP, while manufacturing accounted for 11%, construction for 4%, services including commerce for 39% and government for 13%. (See Table I).

A. Sectors

Agriculture provides a livelihood for 89% of the rural population, while livestock and fisheries have remained unimportant except to local economies. Two cash crops, cotton and palm products, have expanded greatly since the 1960's; cotton has doubled its share of export earnings since 1967, though the increased importance of palm production does not appear in export statistics due to border trade in this product. These two products plus cocoa account for 81% of the value of exports.

Dahomey does not produce enough food for its domestic demand - rice production is rapidly increasing but lags behind demand. The Government is attempting to increase rice production in the Oueme Valley in the south and in traditional rice-growing areas. Cotton production may be spurred with the opening of a new textile mill, yet the market for this mill would be uncertain, as Niger could not maintain its infant textile industry without protection against Togolese and Nigerian products.

Industry, construction and power account for only 12% of GDP. Dahomey is one of the least-industrialized countries in Africa: only 37 enterprises were functioning or in construction in 1971, with a total investment of only 10.4 billion CFA francs. In 1966, 85% of Dahomean enterprises employed less than 100 workers, while only 1 employed 500 persons. The small size of the domestic market limits the scope for industrialization in the absence of freer trade relations with neighboring countries. The recent rapid growth of industrial production is due to this small base and the completion of a few processing plants for primary materials (cotton, oil palm) and of final assembly plants for import-substitution, plus the growth of construction due to investment activities in the public and private sector. Investment is encouraged by existing firms by a national investment fund requiring an

---

1/ The value of the CFA franc has shifted in terms of the dollar from $1=CFA 223 in October, 1974 to $1=CFA 208 as this went to press in March, 1975.

annual subscription of each enterprise which is repaid after 2 years if investments have exceeded the subscription; such a fund naturally discourages the establishment of new enterprises with high startup costs and need for liquidity.

The tertiary sector, transport, commerce, services and government, accounts for nearly half of GDP, due not only to the role of government in the economy, but to the importance of commerce, which in turn results from the magnitude of Dahomey's trade as an outlet to the sea for Niger and to unofficial border trade. The service sector employs about 36% of the total labor force, as compared to 9% employed in the traditional and modern industrial sector; this sector employs 350,000 women, who dominate Dahomey's trade activities, and accounts for 8% of GDP, while commerce accounts for 25.6% of GDP. The public sector provides 12% of GDP and employment for about 25,000 persons: 15,000 in the Central Government, 2500 in local authorities and 8000 in public or semipublic agencies. The Central Government employment is distributed among Education (30%), Health (16%), Economic Services (12%), of which Agriculture is 7%, and Administration is 18%; the balance (24%) is Defense and Security--a rather high percentage of government employment is in non-productive sectors, although the military's role in government may subsume productive labor in this category.

It is difficult to predict future trends in the economy, given the importance of re-exportation in value-added contributions to GDP. Agricultural "production", particularly of palm products and cocoa, is sensitive to prices paid to producers not only in Dahomey but in neighboring countries, and to total production in these countries: the expected peanut shortfall in Niger will further deprive the railroad and port of its share, about 27,000 tons, of the tonnage exported via Cotonou, and recovery in future years will depend on the distribution of exports between Dahomey and Nigeria. The drought is the explained reason for decreases in palm oil production in Dahomey, and in future years the decrease of the world price of this product, forecast by the IBRD, could lower production of this crop. The role of government in GDP, particularly of the armed forces, suggests that the future income will be affected also by the stability of Dahomean governments and their revenue capacity.

The Government is planning investment in a sugar refinery, palm oil, coffee production, and rural storage to stabilize cereals prices and reduce spoilage at the peasant level. In the south, storage losses by traditional methods are high. This strategy requires major diversification into sugar (which is not included as a major crop in a 1971 listing of 17 major crops) and coffee (1300 tons produced in 1971), as well as greater domestic value-added in the current major export crop. In 1971, 78% of the value of palm products output was accounted for by palm oil and palm kernel oil.

B. Balance of Payments

Official balance of payments data are available only through 1971, although provisional 1972 data were supplied by the Government and by BCEAO. (See Table II). The commercial balance remained heavily negative during this period, according to official statistics, but when it is adjusted for registered commerce the coverage rate for the commercial balance improves from an estimate of 51% in 1970 to 80% in 1971. Nonetheless, corrected exports grew less rapidly than corrected imports due to an estimated decrease in the rate of growth of uncontrolled re-exports to neighboring countries.

The increases in exports are attributable to three sources. First, cocoa increased greatly its relative share and its absolute export revenues, despite a price decrease in 1971. In 1973 the index of cocoa price on a 1967-69 base was 116, or well below the international price index for that period (154); IBRD suggests that the price may decline 16% by 1975 and 30% by 1980, requiring an increase in export volume of 41% by 1980 to maintain the value of export revenues, while a 156% increase would be necessary to maintain purchasing power on the international market. Traffic in cocoa doubled between 1970 and 1971, but this is attributable to re-exportation.

Second, the two principal products, cotton and palm products, increased in tonnage. While the cotton price increased 22% for fibers and 13% for grains, palm products prices decreased, only to increase the next year. IBRD projects a downward price trend for these, cotton declining 27% by 1980, palm oil by 30%.

Third, exports increased due to re-exportations of imported goods not registered in customs statistics, and in a lesser measure of local food products. It is estimated that uncontrolled exports continued to increase, but at a slower rate than in previous periods, increasing 6 billion francs in 1970 and 7 billion francs in 1971.

Imports are difficult to evaluate because of the re-export trade. In the official statistics (Table III) one notes an increase in the items "food, beverages and tobacco" and "finished consumer goods"; in 1971 these two groups accounted for 70% of imports, and over 75% of the total increase in imports. There is no way to separate the accounts for domestic consumption of these goods and re-exportation. Thus, no projection is possible of effects of growth of imports on the "true" export balance, nor of the trend of terms of trade. The total volume of imports has remained constant, while their price has increased greatly in the last few years.

Unlike the interior countries, net factor flows for services are negative in the Dahomean trade balance, reflecting factor services purchased from other countries in the aid process. This item compounds the trade deficit.

Although net factor payments are difficult to estimate for branches of multi-national corporations, both private and public transfers have consistently benefitted Dahomey. Private transfers consist mostly of repatriations of funds by Dahomeans abroad, donor fellowships and study grants given to Dahomean students, and pensions awarded by France. It is governmental transfer payments that have consistently made up the difference between the large current-account deficit and the overall payments balance, which has remained slightly positive. The role of external aid in the economy is clear. For Dahomey, the BCEAO has prepared a decomposition of aid by donors as presented in Table IV.

FAC has contributed largely in rural development (57% of their 1973 aid), educational infrastructure (31%), urban infrastructure (10%) and health equipment (2%). It recently helped finance the Port of Cotonou and studies for its extension. Total aid, including to research institutions, was 3.0 billion francs in 1971, including budgetary support of the Government of 450 million francs and military aid of 86 million francs. In 1972 grants totalled 2.9 billion francs, of which 85 million was military aid; loans totalled 3.2 billion and aid through FED 960 million, for a total of 4.1 billion francs. In 1973 there was no budget aid, but total assistance was 5.9 billion francs, of which 3.1 billion was loans, 513 million was via FED and 75 million was military aid. FAC complains of Dahomean tardiness with request portfolios, and has no idea in November 1974 what will be submitted for requests for 1975 funding; a serious problem exists in the government's absorptive capacity, largely due to the requirement that all agencies work through the Ministry of Foreign Affairs.

C. Human Resources

Because of tribal strife, mobility between the three major regions of Dahomey is severely limited. This factor could seriously handicap future plans for resettlement involved in the oncho-freed areas or for reducing population pressure on the overexploited southern lands.

While previous estimates based on INSEE surveys placed the population of Dahomey about 2.8 million in 1971, growing at about 2.8%, Dahomeans estimate (on the basis of a recent Togo census) that their population is actually 3.7 million. Eleven percent of the population live in the six main urban areas. A great difference in life expectancy exists between urban and rural areas--one estimate is a 50% difference. The population is unevenly distributed due to historical factors, with a large density in the south, ranging from 102 to 133 inhabitants per square kilometer in the three coastal departments.

About 55% of Dahomey's labor force is engaged in rural activities, 9% in industry and 36% in services. Aside from the rough estimates of manpower distribution cited earlier, and despite a 1967 ILO attempt, little is known of the manpower distribution, and hence its constraints on development. 7.5% of Dahomean employment was foreign in 1967, of which 4% represented

non-Africans; this was highest in management levels where Dahomeans represent only 34% of employment. A government official signalled a serious problem of international outmigration among the foreign-educated, a problem which may be alleviated by the new university, although such a university may not cure alienation from the rural society. There is a shortage of skilled manpower in nearly all segments of the Dahomean economy, according to IBRD, while the FAC director feels the shortage is primarily of middle-level cadres. Dahomey is known for the quality of its administrators, but this potential is lost to the economy due to patronage and the instability of governments. Further, the French-styled administrative system prevents merit-based promotion, so the system reacts imperfectly to the demands of the country and its supply of qualified manpower.

D. Government Priorities

No overall set of government priorities was presented to the DAP team at our meeting with representatives of the Dahomean government. It was stressed that the government is interested in improving production, rather than commercialization, in various sectors of the economy. The implementation of such programs appears hampered by internal communications within the government: of 10 UNDP projects proposed last year, only one was begun, and several files were held up or lost due to the necessity of working through the Ministry of Foreign Affairs, which may lack the expertise necessary to evaluate projects.

The government has apparently decided to recast its 6 provincial agricultural organizations into one master organization, although the decision made in June had not been released in November 1974. Not knowing the planned agricultural policy of the Government, we cannot comment further. The Director of FED feels that the emerging plan will have a rural development stress, yet be export-oriented.

The group who met with the DAP team stressed that Dahomey is interested in bilateral rather than multilateral aid; in particular, they feel that they have not benefitted from their participation in the Entente, and their opinions were not solicited for Entente projects which affect them; they were not aware that Dahomey was about to participate in the Agriculture Ministers' meeting in Abidjan.

E. Credit

Table V, which summarizes development bank credit to the economy of Dahomey understates the magnitude of short-term credit which is presented largely by commercial banks: BCEAO indicates that total short-term credit in 1970 was 5 billion francs, as compared to 1 billion francs total credit by the development bank in 1970. UNDP indicates that the problems of the economy are those of the rest of the region: the bulk of credit is short-term,

rather than medium-or long-term, and is primarily directed to import and export rather than to the rural peasants who need credit to increase their productivity. UNDP also points out that, as for the region as a whole, the low interest rate supported by BCEAO discourages domestic savings: even before the current inflationary period, the real interest rates ranged between 0.28% and negative amounts for term deposits. There is currently no agricultural development bank in Dahomey, so all loans are provided by the Banque Dahomean de Development (BDD) and 3 commercial banks, BIAO, BNP and SDB. In March 1974, according to BCEAO summary statistics, 89% of all credit to the Dahomean economy was short-term, while only 2% was medium term and 7% was long-term. This structure is not conducive to investment for long-term development.

Unlike most of the Entente States, the Dahomean government operates at a deficit, and thus is a competitor for investment funds rather than a potential source of long-term funding. Currently, the only immediate future for long-term lending in Dahomey is the creation of a West African Development Bank in the BCEAO, as was approved in October, but it is uncertain how this would affect Dahomey.

The USAID Entente Enterprises loan has had problems in Dahomey, not from the demand for such funds, with longer terms and lower interest rate than would be otherwise available to the small entrepreneur, but in the consultant services of a SATEC advisor whose experience is from the French commercial credit system; acceptance of his advice would have AID funds in areas which are already well-funded by the French CC and CCSE, commercial credit for French exports. The loan has been very successful on an artisinal level, where it has permitted small artisans the capital necessary to increase their scale. It was suggested that more rapid credit expansion without the capital-intensifying effects of low-interest could be obtained particularly by providing for working capital to an AID-sponsored guarantee fund for small entrepreneurs.

In general, it is difficult to define a policy of assistance to Dahomey pending the emergence of their new plan. Any assistance would be greatly required in the short term, to assist in the balance of payments, yet its use in directly productive activities seems to be hampered by nepotism and inefficiency in government administration. The government of Dahomey is interested in bilateral assistance rather than multilateral assistance to match their needs as closely as possible, and all attention should be given to this possibility to the extent that the government appears willing and able to carry out a development plan. Among the greatest problems of the economy is the structure of its credit mechanism, which encourages illicit trade and short-term capital rather than directly productive investments in the economy, and any strategy undertaken to change the credit structure and to increase the direct productivity of the rural sector of the economy would contribute greatly to the country's economic stability and development.

Table I Gross Domestic Product at Current Prices by Origin

1967-71

	1967	1968 1/	1969 1/	1970	1971 1/
	(in billions of CFA francs)				
Primary sector	17.2	17.9	18.9	19.2	21.6
Secondary sector	5.2	5.7	6.5	8.4	9.8
Tertiary sector	26.3	27.7	29.7	33.8	34.4
GDP at market prices	48.7	51.3	55.1	61.4	65.8
	(In percent of GDP)				
Primary sector	35.3	34.9	34.3	31.3	32.8
Secondary sector	10.7	11.1	11.8	13.7	14.9
Tertiary sector	54.0	54.0	53.9	55.0	52.3
Total	100.0	100.0	100.0	100.0	100.0
	(Annual percentage rate of change)				
Primary sector	...	4.1	5.6	1.6	12.5
Secondary sector	...	9.6	14.0	29.2	16.7
Tertiary sector	...	5.3	7.2	13.8	1.8
GDP at market prices	1.0	5.3	7.4	11.4	7.2

Source: I.M.F., Dahomey - Recent Economic Developments, SM/73/249, Nov. 1973, p.2

1/ Provisional staff estimates

Table II Balance of Payments

(Unit: Million CFA francs)

	1968	1969	1970	1971	1972*
Exports, fob	8242	11127	15105	19303	16614
Imports, cif	14451	17251	20317	24155	24516
Trade surplus or deficit (-)	-6209	-6124	-5213	-4852	-7902
Services, net	-1307	-1594	-2147	-2038	-1876
Net transfer payments	5952	4725	5969	7040	7964
Private transfers, net	(1070)	(1014)	(1206)	(1890)	(2230)
Government transfers, net	(4882)	(3711)	(4763)	(5150)	(5734)
Net Capital, public & private	2134	2694	2548	2470	2899
Net errors and omissions	310	670	1150	-580	-1398
Surplus	816	371	2307	2040	-313
Allocations SDRs	-	-	466	386	383
Overall surplus	816	371	2773	2426	70

* provisional

Commercial Balance

(Unit: Million francs CFA)

	Imports	Exports	Balance	Coverage
1960	7643	4513	-3130	59%
1961	6275	3579	-2696	57
1962	6627	2698	-3928	41
1963	8249	3155	-5094	38
1964	7762	3254	-4508	42
1965	8491	3367	-5124	40
1966	8270	2585	-5684	31
1967	10720	3774	-6946	35
1968	12208	5508	-6700	45
1969	14129	7067	-7061	50
1970	17660	9062	-8598	51

Table III Value of Exports by Principal Products, 1967-1971

(Unit: Million CFA francs)

	1967	1968	1969	1970	1971	Per Cent 1967	Per Cent 1971
Palm Products	1580	2891	2860	3765	3983	41.9	34.2
Palm kernel oil	895	1778	1677	1853	2011	23.7	17.3
Palm oil	294	432	452	1102	1116	7.8	9.6
Palm cakes	251	350	404	389	431	6.7	3.7
Palm kernels	140	331	327	416	425	3.7	3.6
Cotton	389	742	1046	1620	2608	10.3	22.4
Cotton fiber	325	681	896	1465	2204	8.6	18.9
Unginned cotton	64	61	150	154	404	1.7	3.5
Coffee	139	68	359	471	417	3.7	3.6
Peanuts	171	240	212	176	275	4.5	2.3
Peanuts, shelled	230	274	294	286	241	6.1	2.1
Cocoa	*	*	1183	1699	2809	*	24.1
Cashew nuts	*	*	84	26		*	-
Other products	1265	1293	1031	1019	1317	33.5	11.3
TOTAL:	3774	5508	7069	9062	11650		

* Included under "other products"

Source: Dahomey, 5 Annees de Commerce Exterieur, 1965-1969, and Dahomean data, cited in IBRD report.

Imports by Groups of Products

	1968	1969	1970	1971	Per Cent 1968	Per Cent 1971
Food, beverages, tobacco	2443	2427	2948	3322	20.0	15.7
Energy and lubricants	573	494	672	770	4.7	3.6
Primary materials:	590	930	754	978	4.8	4.6
Animal and vegetable	n/a	n/a	(278)	(503)	n/a	(2.4)
Mineral	n/a	n/a	(476)	(476)	n/a	(2.2)
Intermediate goods	175	178	309	290	1.4	1.4
Manufactured goods	8430	10100	12977	15841	69.0	74.7
For industry, agric.	(2960)	(2960)	(3800)	(4304)	(24.2)	(20.3)
Finished consumer goods	(5470)	(7140)	(9177)	(11537)	(44.8)	(54.4)
TOTAL:	12211	14129	17660	21202		

Source: BCEAO

DAHOMEY

Table IV Non-military Government Aid Received, 1972

(Unit: Million CFA francs)

	Tech. Asst.	Grants	Grants Products	Projects & Other	Total	Study & School	TOTAL * Amount	TOTAL %
France	801	528	363	194	1886	75	1962	32.2
Other E.E.C.	121	5	201	-	327	70	397	6.5
F.E.D.	52	472	232	140	896	86	982	16.1
U.S.A., Canada	164	91	10	8	271.	50	322	5.3
Other OECD	172	-	-	-	172	2	175	2.9
Other (China, USSR, etc.)	183	25	61	1032	1301	46	1347	22.1
Other International Organizations	466	58	263	48	835	71	906	14.9
Total *	1959	1179	1130	1422	5689	401	6090	

Source: BCEAO La Balance des Paiements en 1972 (provisional results)

* Totals may not add due to rounding.

Table V: Distribution of Credit by Development Bank, Dahomey

(Unit: million CFA francs)

	1968	1969	1970	1971	1972	Per cent: 1968	Per cent: 1972	# Loans 1972	
Agriculture	400.1	829.0	708.1	1052.1	912.0	44.1	64.8	7	0.4%
Automobile	11.3	3.6	12.2	12.2	7.6	1.2	0.5	10	0.6%
Building	122.1	62.0	154.0	187.8	375.8	13.4	26.7	1675	96.5%
Commerce	50.5	45.0	80.3	44.7	43.0	5.6	3.5	10	0.6%
Industry/Artisinat	323.0	22.0	121.3	378.1	60.5	35.6	4.3	9	0.5%
Consumer durables	1.0	0.4	0.5	0.9	7.7	0.1	0.5	25	1.4%
TOTAL	908.1	962.0	1076.3	1676.9	1406.6			1736	
Long-term					-		-		
Medium-term					312.4		21.2		
Short-term					387.0		27.5		
Current account					707.0		50.3		

DAHOMEY

AGRICULTURE AND LIVESTOCK SECTOR ASSESSMENT

I. Definition of National Food Problems

Dahomey has been unable to produce sufficient food and meat to meet domestic needs. According to a recent IMF report, food production has been basically stagnant since 1968/9. Each year the government has been importing substantial quantities of rice, wheat, flour, sugar and milk. Estimates are that production will continue to be about 40% behind consumption through 1976. Food crop production by crop was as follows for the five year period 1968/9 through 1972/3:

Crop	1968/9	1969/70	1970/71	1972/3	1972/3 *
		(000 metric tons)			
Cassava	681	651	813	689	695
Yams	527	530	519	527	530
Maize	200	200	160	175	178
Sorghum	63	64	42	48	46
Beans	25	25	28	31	31
Millet	6	6	5	7	8
Rice	2	3	5	5	5

* Estimates

Source: IMF report on Recent Economic Developments - Dahomey, 1973

The basic cause of food production shortfalls (or failure of food production to increase) is that agriculture in Dahomey is still predominately traditional. As nearly as could be determined in discussions with other donors, the food production sector has not begun to modernize. A few programs in animal traction have been tried but the adoption by peasants is minimal. (The Peace Corps Director said there were less than 2,000 pairs of oxen in the country. The UNDP said 15,000). Fertilizer is very expensive and its use has generally been limited to export crops. With population increasing, accelerated migration of rural people to urban areas, and increased emphasis on export crops such as cotton, the food production sector has not kept pace.

A final factor affecting the amount of food production available for consumption is the high levels of storage losses, especially in cereals. The southern portion of the country has been having losses of up to 40% at the farm level. The figure is 25-30% for the northern regions.

Livestock Production

Livestock production in Dahomey although important is only a minor contributor to the GNP and the country is a net importer of cattle and small ruminants.

The value of the annual production was 2.250 billion CFA of meat and products and 250 million CFA of milk in 1965, plus hides and skins. This comprised 6% of the GNP and over 10% of the primary sector. These are rather higher percentages than are found in the other coastal countries.

As indicated by the following table, from 1965 to 1970 the value of subsistence agriculture and livestock production increased only slightly at constant prices. The increase in subsistence crop production was 6.2%/year or 0.3%/year at constant prices. Livestock production increased at about the same rate at 1965 prices. The increase in the value of cash crops, however, was 11.5%/year or about 9.9% at constant prices.

Value of Production of Agricultural Sector

	1965/6 million CFA	1970/71 1970 prices	1970/71 1965 prices
Subsistence crop	12,773	17,229	12,932
Cash Crop	3,442.8	5,906	5,500
Sub Total	16,216	23,135	18,432
Livestock	2,500	4,000	2,764
Grand Total	18,696	27,135	21,196

According to a 1973 IBRD report, while 80% of Dahomean land is cultivable, only 12% of that land is now exploited. Average population density in the northern region of the country is only 12 inhabitants/km^2 as compared with 120 inhabitants/km^2 in the three administrative regions in the south where soil fertility is decreasing in certain areas. Nevertheless, due to traditional tribal enmities, migration of southern farmers to the north and central regions cannot be expected to occur.

A. Cash Crops

Government agricultural sector development programs in the past have emphasized cash crop production. Palm oil products and cotton are Dahomey's principal cash crops. Cotton has been the most dynamic element of agricultural development in the northern and central regions. With the assistance of FAC (and more recently IBRD), cotton production in the Zou and Borgou regions has increased from 6,000 tons in 1965/66 to 47,000 tons in 1971/72 and is expected to reach 84,000 tons by 1976/77. The techniques introduced in the Borgou region have spontaneously spread to the eastern part of neighboring Atacora region. Atacora, Oueme and Mono (the latter two regions in the south) seem to have good potential for cotton development. Government efforts to stimulate cotton production are now carried out within the context of broader integrated rural development projects where cotton is rotated with subsistence food crops.

Minor cash crops in Dahomey are cashew nuts, kenaf, coffee and fruits.

B. Food Crops

Major food crops in Dahomey are cassava, yams, maize, sorghum, beans, millet and rice. Food crop production has not kept pace with population growth in recent years in part due to adverse weather conditions, but largely because of traditional agricultural practices, inadequate extension apparatus, and poor government price and marketing policy. Large storage losses also limit the amount of cereals available for consumption. By contrast, Dahomey has the potential to fulfill not only its own food consumption requirements, but could also export food crops to foreign markets, especially Nigeria.

Government efforts to increase food crop production have centered on rice which is consumed by rural as well as urban Dahomeans and is a significant food import. Large rice development projects have been financed on the Niger River (1,500 ha - formerly Taiwan, now China); in the Oueme River Valley (3,000 ha by 1976 - UNDP, AFDB); and in the Zou-Borgou project zone (3,300 ha of "bas-fonds" - FAC/IDA). Prospects for further rice development are favorable since good varieties are available and the crop is less dependent on the vagaries of weather than dry-land food crops.

Development of other food crops such as maize, sorghum and beans, the production of which has stagnated since the late 60's should also be emphasized as elements of an integrated food/cash crop rotation. With the increased use of improved maize and sorghum varieties being produced in neighboring Nigeria, production of these crops could increase substantially if accompanied by improvements in extension services, adoption of animal traction, storage facilities, the provision of agricultural credit, improved transport and marketing infrastructure, and farmer-oriented price policies.

Agricultural Research

IRAT, the primary agricultural research organization in Dahomey, is presently doing work on the means to replace slash and burn-type agriculture with permanent farms and farming techniques which would prevent deterioration of soils. In the face of rising fertilizer prices, they feel this can be done only if fertilizer is subsidized. IRAT has also conducted research on cereal yields using phosphate mined in Togo and has carried out trials which stress proper spacing, time of planting, etc. They feel that seed multiplication is a problem, especially for corn. While their estimate may be unrealistic they see a need to increase seed multiplication capacity from 10 tons/year at present to 1000 tons.

Extension Services

Until recently extension work has been carried out by SONADER in the south and by semi-public French companies in the north (CFDT-Borgou region, SATEC-Zou region, BDPA-Atakora region). Extension personnel are trained mainly for specific cash crops (cotton, palm oil). In recent years this system has been heavily criticized as general rural development has been neglected. The CARDER organizations (see below) have been created in order to consolidate rural development planning and probably implementation (including extension work) in a single regional organization.

Marketing

While cash crops have been marketed through various public and private companies, food crops are marketed at the farm level through traditional methods and channels at prices which hardly stimulate farmers to increase their production. The government has encouraged the growth of cooperatives which could eventually market produce. Although the cooperative movement in Dahomey is still very young and conclusive results are not yet available, several donors are discouraged by progress thus far achieved.

C. Livestock

In 1972 Dahomey had a national herd of approximately 650,000 cattle, 630,000 sheep, 637 goats, most of which are found in the Borgou, Atacora, Zou and Kandi regions. Significant numbers of livestock are imported from Upper Volta and Niger to meet consumption demand. In the face of declining imports (9,000 head in 1966, 3,727 head in 1972), the government plans to increase the national herd especially through the purchase of immatures for small farmer finishing and use of oxen for traction. A UNDP project has successfully introduced over 1000 oxen into the Borgou region and is being transferred to the Zou region. Peace Corps and FED also have animal traction programs or program components in the northern regions of the country.

Herd Health

The Dahomean cattle herd has a very high morbidity (2.6%) and mortality (1%) from rinderpest. Data on immunizations in 1970 and 1971 are not available but, if effective, the 1972 level of immunization, particularly in the worst affected regions, (Borgou, Kandi, and Atacora), is very high (97%). For the country as a whole it is 86%. However, although the regions with the most cattle are covered well by the immunization program, the regions of Atlantique and Mono, with relatively high morbidity, have relatively low rates of immunization.

Bovine trypanosomiasis is also a serious problem with reported morbidity of 11.75% for the country and as high as 16% in the northmost region, Kandi. Mortality is relatively low and immunizations roughly equal morbidity (i.e., immunizations = 104% of morbidity). The rate of immunization has been relatively constant from year to year but 1972 produced a 50% higher morbidity than 1971. Most cattle will need at least two and perhaps three inoculations a year. Usually drugs are given for prophylaxis as well as for treatment. It seems that emphasis in Dahomey is on treatment and there is very little prophylaxis. Contagious bovine pleuropneumonia which is typically as serious as rinderpest or more so, seems to be quite well under control.

In conclusion, Dahomey has serious problems with rinderpest and trypanosomiasis, which would be expected to be reduced given proper immunization for rinderpest and prophylaxis for trypanosomiasis. The problem is always very serious where animal traction is being promoted. Loss of oxen due to diseases can jeopardize the whole animal traction program.

The problem should be discussed with the livestock service, IEMVT (Maison Alfort, Paris) and FAC. In recent years, the FED has provided grants to many francophone African countries for drugs and German aid has given funds for prophylaxis against trypanosomiasis (using German drugs).

The small ruminants also have a 0.6% morbidity of rinderpest and equine trypanosomiasis morbidity is reported to be 11.75% in Borgou, 2.2% in Kandi and 18% in Atacora.

II. National Response to Agricultural Problems

The GOD recently held a major planning exercise in which they are said to have developed a new agricultural plan and organizational structure. This plan has not been made public and the government refused to discuss it with the DAP team. Discussions with other donors and limited information on GOD project design priorities do, however, give us some idea of what the GOD plan will probably contain. Rural development will be a top government priority and government administration will probably be decentralized with decreased influence by vertical one-crop "Societe". Rural development programs will be planned and possibly implemented by regional CARDER (Centre d'Action Regional pour le developpement rural). At present CARDER exist for only the Mono and Atacora regions.

According to the government planning agency (attached to the Presidency) at least four major projects are being prepared: 1) Development of food crops in Dahomey; 2) Rural development in the Atacora region (the President's home region); 3) Rural storage and 4) Strengthening of the agricultural extension network and the rural youth program (includes the 4-D program). In addition the Livestock Service hopes to increase the use of animal traction and increase peasant finishing of cattle used for traction. Since there are 16,000 oxen presently being used for traction, this would provide 4-5,000 head for slaughter/year at 200 kg. carcass weight compared with 110 kg. weight from traditional herding. The goal of the program is to increase the numbers of cattle used for traction (two pairs per farmer rather than one at present) and eventually slaughter.

The Livestock Service also hopes to begin a livestock development program in the Bassila area, in the extreme south of the Atacora region. This area, affected by onchocerciasis and trypanosomiasis could be used for mixed farming and extensive livestock production.

III. Recommendations for Possible AID Intervention

AID policy presently precludes bilateral grant assistance to Dahomey in the agricultural and livestock sectors. However, many of the activities noted below could be funded via Entente Council programs in these sectors or through other regional mechanisms (JP 26 AFDB). Given the limited information made available to the DAP team in Dahomey and the uncertainty of government priorities, the recommendations found here are highly tentative.

A. Agriculture

1. Food storage. The government apparently is preparing a project which will improve storage at the village level (1.5-2 ton units), the regional level (2,000 ton units), and the Cotonou port. AID involvement could possible be linked to the Peace Corps storage program.

2. Seed Multiplication (maize, sorghum). This would probably include increased varietal trials (adaptive research) in the major zones of the country and seed multiplication. It should be closely linked to JP 26.

3. Feasibility studies for mining of rock phosphate in the north.

4. Rural Integrated Development - Atacora region. Through the Entente programs AID might provide funds for a livestock (Bassila) or an agriculture component of a rural development program sponsored by another donor. FED will provide major assistance to the region.

5. Cattle supply for animal traction.

B. Cattle Supply for Animal Traction

Dahomey has several local breeds of cattle which are being used in the different regions. Apart from Sahelian zebu cattle which come down into North Dahomey for the dry season, the most common cattle breed is the Borgou. This is equivalent to a taurine crossed with a zebu in being somewhat resistant to trypanosomiasis. It is being widely used for animal traction, with a mature live weight of 380-400 kg.

In some zones the Borgou is not sufficiently tolerant and so the smaller Somba (170-260 kg liveweight) or Somba X Borgou has to be used. The smallest breed is the Pabli, with a mature weight of about 150 kg. This like the Somba could be termed very tolerant of trypanosomiasis.

The ox is typically assumed to be able to pull 10% of its liveweight.

There has been little breed improvement in the Somba and Pabli breeds and not much more in the Borgou. Because of the importance of size of oxen for traction, a supply of selected bulls for improving the quality of the supply of draft oxen could be very useful.

DAHOMEY
EDUCATION/HUMAN RESOURCES DEVELOPMENT SECTOR ASSESSMENT

Introduction:

Among the Entente States, the basic statistical data for Dahomey was the most out-of-date national information the DAP team had to work with. In response to the team's requests, representatives of various ministries promised to provide more up-dated statistical information, but in the case of the Ministry of Education, this information was never furnished. Ministerial representatives claimed, however, the data was available for the past two years but that there hadn't been funds to pay for the paper and printing costs required to publish them. Incidentally, this was the only country among the Entente States where the DAP team found this situation. And it is interesting that this should be the case in Dahomey which probably has the largest reservoir of trained bureaucrats in former French Africa.

In fact, Dahomey may be an instance where a well-trained sophisticated bureaucracy manages to manipulate the bureaucratic structure so as to appear efficient and blameless while in fact accomplishing relatively little. The form and style of the bureaucratic structure is polished but there is little regard for the actual performance or output of the system. This may be further complicated by the impression acquired by team members that the bureaucratic system was also in the process of being politicized. Perhaps the very availability of bureaucrats with a general (not special or technical academic and experiential) background also tends to make those in the system cautious and protective of their positions at the expense of innovation and dynamism. This subsequently has been reflected in the proliferation of bureaucratic structures which essentially have been formed in order to by-pass the major ministries' "immobilisme" at the managerial levels and the inefficiencies at the lower levels. The evolving new governmental and para-statal agencies appear to be poorly coordinated or interfaced and often in actual competition with each other and with more traditional ministerial bodies. Thus, during the First Five Year Plan, 1966/70, the Intermediary Plan of 1971/72, and the projected Four Year Plan, 1973/76, significant developmental responsibilities were placed on special organizations created to improve production, processing, and export of key commodities--e.g., SONADER for palm products (and the palm products factory, SNAHDA at Cotonou), SONACO which coordinates CFDT and SATEC in rural development activities in the departments of Zou and Borgou, etc. At the same time the CARDER (Centre d'Action Regionale pour le Development Rural) system was organized to carry out regional development under a departmental committee for which representatives of the technical services in government would provide specialized advisors. CARDER's areas of responsibility would include commercialization of agriculture, agricultural extension work, the organization of producer groups, and mutual credit. It was also designed to break through the "inertia of the services charged with rural development."

It appears, however, that the only CARDER which has functioned with any impact is in Mono. This three-prong structural approach (ministerial, regional and product oriented) continues to function with apparently little consideration being given to some form of structural rationalization. Competition among them may result in "survival of the fittest" which might be a desirable (if costly) outcome, provided that the non-productive and inefficient structures are abolished.

I. Background

As elsewhere in the Entente Area, Dahomey appears prepared to launch a major educational reform. Nevertheless, the country has made impressive progress in increasing enrollments since independence. While the literacy rate has doubled during the past ten years, it is still only about 11% of the population. Literacy is also much higher among the youth than among those over 35 years of age, where it is estimated at 4% of the population. This low rate for adults reflects the lower enrollment rates in the past and the continuing lack of adult education. As is true in most West African states bordering the South Atlantic, literacy is higher among the men than women, higher in the urban than in the rural areas, and much higher in the south along the coast than it is in the north.

In 1972 Dahomey reported having 859 primary schools, 59 secondary schools, nine technical schools and one university in the process of being established. Of the total budget, the Ministry of Education's share was 19%, excluding the funds the government spent on scholarships. But if scholarship funds were added to the total, expenditures on education would reach 27% of the budget.

During the past 10 years enrollment in primary schools has more than doubled while the enrollment in secondary schools has more than tripled. However, in spite of these efforts, the country still enrolls only 27.9% of the students at the primary level and 6% at the secondary level. The imbalance of primary enrollment by province in 1971 went from Atlantique Province with 62.43% enrollment, to 35.72% for Oueme Province, 31.36% for Mono (all three on the coast), 30.26% for Zou (central region), and 21.63% for Borgou and 19.38% for Atacora (both of the latter being in the northernmost part of the country). For 1971 the total primary school age population was 661,900, of whom 197,851 were enrolled in primary schools for a national rate of 29.89%. The total population of Dahomey was 2,780,500.

Fundamental to the educational problem in Dahomey is the growing unemployment in the cities, and the proportion of school graduates among the unemployed is increasing rapidly. Nevertheless, skilled jobs in industry and trade have remained difficult to fill and there is still a wide range of employment possibilities in the agricultural sector. The World Bank report of 1973 ascertained that there was still a shortage of skilled manpower in all sectors of Dahomey's economy.

Still, education has been increasing much faster than the government had intended: while the 1966/70 development plan called for primary school enrollment of 151,000 in 1971, the figure was nearly 198,000; and at the secondary level, it was projected that 200 students would be graduating from secondary school while in fact there were over 600.

In 1970 the government decided upon the establishment of a University of Dahomey on the outskirts of Cotonou where emphasis is to be placed on the creation of colleges of agriculture, medicine, technology and education. This new university, which receives substantial technical and capital assistance from France, replaces the regional Higher Education Institute of Benin which had served both Dahomey and Togo since 1968. The Dahomean Government has justified this expenditure on the basis of national independence ("an independent nation must have its own university") and concern over the fact that Dahomean students have already been expelled from other Francophone states--from Senegal and Ivory Coast. In 1971/72 there were about 1,100 Dahomean students attending foreign universities. The potential loss among this group is indicated by the fact that out of 106 fellowship grantees under UN-related programs only 20 returned to Dahomey.

The university's programs parallel those of French universities and attempts to introduce substantial curriculum changes have failed because of pressures from students and teachers to adhere to the French model.

II. Previous Education Reform Efforts

Since 1962 the Ministry of National Education has conducted studies of the education system which pointed out that:

1. education is poorly adapted to the needs of youth. Instead of preparing them to work better in their milieu, formal education contributes to an acceleration of the rural exodus;
2. education is very expensive in relation to the country's financial resources and to its ability to pay these costs;
3. the number of educated unemployed is increasing;
4. the number of repeaters, dropouts and those failing the examinations is also increasing.

These findings attest to, and are the consequence of, the fact that the educational system is oriented toward the preparation of a bureaucratic elite.

The Ministry of National Education established a planning department and a law was promulgated in 1971 seeking a reorientation of the educational system. The objectives of the law were:

1. to modify education so as to adapt its structures and programs to fit the needs of different sectors of the economy;
2. to regionalize education so as to remedy the regional disparaties and to democratize access to education;
3. to slow down access to classical primary and secondary education so that the output would begin to match national needs for cadres;
4. to create and develop a Dahomean University (noted above).

The proposed reorganization was to provide for more practically oriented terminal exit points from the educational structure: after six years of primary school there are three options: two years of cooperative school, two years of industrial school, and a two year orientation cycle in the general secondary program. At the third year of secondary, options could be selected in literary, scientific or technical specialization for those continuing on in general secondary education. After the fourth year of secondary came an option to go into normal school for two years and after the fifth year of secondary another option was established permitting admission into a three-year polytechnic college program. Those completing the general secondary (six years) would go on to the university where they had a common year before selecting from among six different options: agriculture and agricultural technology, science and technology, literature and linguistics, training of cadres, the Institute of Regional Development, and medicine. The application of these reform recommendations has apparently been spotty.

A second effort at reforming the system related to the "Integration of the School into the Milieu" program. The project was divided into two parts, one dealing with the ruralization of education and the other with an evaluation type of research on the results of the ruralization reform efforts.

The Ruralization of Education, included in the First Development Plan (1966/70) under the Ministry of Education, sought to find ways of inducing young school graduates not to desert their villages. It was to be carried out at three levels:

1. the primary school level (Ecoles Primaires Ruralisees),
2. the secondary school level (College d'Enseignement General Ruralises, i.e., College d'Enseignement Moderne Agricole--CEMA),
3. post-primary centers (Centre Cooperative de Formation Agricole et Artisanale--CCFAA).

The ruralized primary school was to brake the departure of the young students from the rural areas, to influence the school environment so as to promote an interest in agriculture, and to prepare laborers capable of putting into practice modern techniques not requiring costly investments.

Each school was to have a garden, an orchard or a field (from ½ to two hectares). Some of them might even work with commercial crops (palm oil, teak, cashews). The students follow the same curricula and have the same schedules as those in regular schools. The agricultural and artisanal activities add two to four hours per week to the school program. The teachers received a small compensation from the BTED (Bureau Technique d'Etudes et de Documentation, plus assistance from an itinerant counselor--one counselor for every 10 to 15 schools. The BTED was created in 1967 under the Direction de l'Enseignement Technique to promote the ruralization of education. This was to involve, specifically, the preparation of projects and programs for agricultural and

artisanal education, the provision of advice to the teachers, the evaluation of results, and the study of technical and pedagogical questions related to the ruralization efforts.

Materials, manure and seeds were furnished through donations from FAC and UNICEF. Each ruralized primary school has a school cooperative through which it sells the products harvested from the fields or produced in the shops. The money earned is used to buy school furniture and to cover certain expenses related to the health and attire of the students.

Positive aspects of the ruralized primary schools which function well are that the students: participate in the productive activity, manage a school cooperative and utilize the earnings realized in order to support the school canteen, provide better equipment for the school, and pay for medical care. Two ruralized primary schools mentioned as working well were Bensekou and Agonsa. The amount of money earned by different schools in excess of 10,000 CFA is reported below:

School Year	Number of Schools with Receipts of 10,000 CFA or More					
	100,000 to 200,000	50,000 to 100,000	30,000 to 50,000	20,000 to 30,000	10,000 to 20,000	10,000
1970/1971	2 schools	2 schools	19 schools	52 schools	50 schools	100 schools
1971/1972		2 schools	6 schools	30 schools	70 schools	120 schools
1972/1973		4 schools	10 schools	50 schools	70 schools	100 schools

As will be noted, any improvement occurring in the second year had generally been lost by the third year.

The difficulties which have been encountered by the ruralized primary schools include the following:

1. There is no harmonization of the academic program with the practical activities. The latter are purely and simply additive.
2. The teachers are insufficiently trained for the agricultural activities and are not always convinced of the value of the ruralization effort.
3. There are difficulties in establishing a proper balance between academic and rural activities. Some schools place too much emphasis on production; others, on the contrary, are satisfied with the regular teaching practices and dodge the school garden activities.

4. A follow-through complementary professional training program does not exist for students leaving the primary school, and the majority of the graduates have difficulty in fitting into agricultural production activities in their respective localities.
5. Even if a ruralized school functions perfectly, this school does not resolve the problems of the youths' futures if the villages have not also become engaged in developmental actions which permit the youths to integrate their new techniques into a changing and modernizing style of life, i.e., into an evolving social and cultural environment.
6. Finally, the enterprising action of the primary school only has a chance of success if it is assisted by the agents of intervention in the village--rural development and action cooperatives, improved health programs, development of handicraft skills, etc. In other words, the ruralized primary school can only be effective if it is a part and a partner in an integrated rural development effort.

Colleges of Modern Agricultural Education (CEMA) were established to provide ruralized secondary level education. Five of these schools have been established (Adjohoun, Aplahoue, Savalou, Kandi and Boukoumbe). Their basic goal is to train middle level rural technicians. However, the CEMA is nothing more than a rural secondary school in which there has been added the regular school program (same curricula, same schedules) to courses in agricultural sciences, practical agriculture and some instruction in agriculturally-related handicrafts. The students participate in these additive activities for six hours per week working in the gardens, or orchards, or in other agriculturally oriented endeavors. At the end of their schooling (first cycle secondary) they can take the BEPC modern exam plus an agricultural test. If they pass, they not only receive their BEPC but they obtain a mention in agriculture as well.

Problems: Unfortunately many CEMA students who have received their BEPC's with agricultural mentions have not been able to find employment. In fact, all that has happened in the CEMA's has been that unintegrated agricultural activities have been added to standard educational methods and content. Consequently, the degree is worth little more now than it was before the reform.

As the name indicates, the Cooperative Centers for Agricultural and Artisanal (handicraft) Training (CCFAA), is directed toward practical and applied work. The students are recruited from the sixth grade of primary school. The two year programs focus on professional preparation both in self-directed and in collective activities. There are only two CCFAA's in Dahomey, one at Oudah (which has an agricultural section and an artisanal section--options in tanning and blacksmithing) and one at Ina (agricultural section only). Upon completion of these programs students are encouraged to associate with cooperatives.

Problems: The students trained have been employed by SONADER under the same conditions as other workers with no allowance having been made for their

CCFAA training experience. The CCFAA graduates have neither land nor money to establish themselves in business nor are there cooperatives available for them to associate with.

The Center of Research for (Ruralization) Programs (Le Centre de Recherche pour les Programmes--CRP) was created to tackle all of the problems involved in the ruralization of education reform. On the one hand, the CRP was to contribute to the formation of a new type of citizen (politically aware of the problems of the country, patriotic and ready to participate in the economic and social development of the country, at one with his environment and proud to serve and defend with selflessness the interests of his countrymen, free of the foreign complexes and responses which serve to separate Dahomeans from their own people and values, etc.). On the other hand, the CRP was to improve pedagogical practices based on research in educational psychology in the Dahomeian context. This latter approach was to find ways of creating teachers who would accept the return of some of the basic elements of the traditional indigenous system, who would motivate their pupils as well as counsel them, who were convinced of the need for a school to promote the collectivity, and who always had open and alert minds.

The CRP was also to manage the National Office of School and University Cooperatives (l'Office National des Cooperatives Scolaires et Universitaires), and to create and control school canteens (which were assisted by the World Food Program).

Thus the principal objectives of the CRP were: (a) to reform the curricula so as to adapt it to the natural and human environment, (b) to create teacher-training programs (both introductory and continuing in nature), (c) to prepare a new type of teacher (with the characteristics indicated above), (d) to design new teaching methods adapted to the new curricula, (e) to promote the concept of the school as a unit of production, and (f) to develop approaches for common, concerted, and collaborative programs, in cooperation with the animateurs and counselors of various ministries, which would be designed to achieve integrated national economic and political development.

Based on limited discussions and observations, it appears that the CRP did engage in some evaluative studies of the ruralization of education program and carried out some of the administrative duties which had been assigned to it. There was no evidence that it had made any significant contribution to the major tasks it had been assigned in behavior modification and human resources development vis-a-vis students and teachers and the new role of the school in society. It appears that the resources assigned to the CRP were in no way related to the magnitude of the tasks it had been allotted. However, the breadth of the mandate given to the CRP is indicative of the profound nature of the educational reform desired.

Comment: While there continue to be a few outstanding ruralized primary schools, the results in general are reportedly disappointing. A substantial part of the problem has been lack of funding and of coordination--seeds, tools, trees, and gas often arrived too late or not at all; vehicles, when available, have broken down and not been repaired and the itinerant counselors have rarely visited many of the schools so as to provide the advice the students required to accomplish their practical programs. Where there are successes in a given school, they appear to be attributable to the dedication of one or two individuals who achieve appointed goals, in spite of the system. The ruralization effort will evidentally soon be evaluated by FAC and UNICEF. Meanwhile, the Peace Corps has become so disillusioned with the operations of the primary schools ruralization program and the CEMA schools that PCV's will no longer be assigned to support their operations.

Even more important, in spite of the government's conviction that more training is needed throughout the country in agriculture, no preparations have been made to assist those who have been trained in agriculture to employ or sell their new skills. Agricultural training has not made it easier for graduates to be employed in rural areas, and when graduates are hired, they are not paid more because of the additional agricultural training they have had. There are no programs to channel graduates into productive agriculture; and after having been oriented toward cooperatives, graduates find there are hardly any cooperatives functioning in the country. The two artisanal centers are reportedly working at rather low enrollment levels and are supporting themselves through the sale of their products.

Given the lack of employment opportunities resulting from the rural school experience, and given the additional effort required to follow this program in combination with the complete traditional (classical) school program, it is no wonder that students and teachers are generally not enthusiastic about participating in the ruralization education project. In view of the results achieved it is rather difficult to justify the extension of that model to the rest of the country, at least until the system's shortcomings are corrected. A change in the school program, unsynchronized with economic requirements, is counter-productive. The developmental procedure must be integrated, for the school is not the prime mover of economic development. In Dahomey this integration of development efforts has not occurred.

It appears that there will be a new and major educational reform promulgated during 1975 or 1976. Educational officials have expressed concern that it will be a reform by "fiat"--it will be announced and it will be ordered to be implemented. There will be no experimentation or pilot projects conducted, upon which to test the reforms and if need be to modify them before attempting to impose them nationwide. Educators fear that a reform of this type will be worse than no reform at all, for it runs the risk of raising expectations, of being costly and disruptive, and then of failing.

Recommendation: If the Government of Dahomey were to ask AID's assistance in evaluating the ruralized educational reform to determine how that experience might be used to assist any proposed educational reform, or if the U.S. could assist with pilot projects which would form the bases for developing a viable national model, then AID should give serious consideration to assisting with such research and development efforts which would result in a functional model. Limited assistance might be given at either the planning and/or implementation level in conjunction with other donors desirable--perhaps with FAC and UNICEF. However, if there is no U.S. involvement at the planning stage then there should be no U.S. involvement at the implementation stage, unless the plan is ascertained by U.S. officials to be potentially viable. AID might especially wish to evaluate the CRP to determine if it could be built into a major research and development center capable of evaluating, modifying and directing a systems-wide educational reform effort.

III. Non-Academic and Non-Formal Education

A. Agricultural Extension Activities: Dahomey apparently suffers from a significant shortage of agricultural extension agents, yet the training facilities for preparing such personnel are extremely limited. The village level agricultural extension workers are called animatrices (women) or encadreurs (men). There is one school in Porto Novo (Ouando) which trains animatrices. To be admitted they must have a BEPC and be between 18 and 25 years old. The course is 9 months long and is practical. After completing the program the women are sent back to their own tribal areas to work and are paid about 12,000 CFA per month. The encadreur receives the same amount of training at a school in Sekou. Both schools are good institutions. Ouando was established by the Dutch and Sekou by the Swiss, and both original sponsors have now withdrawn. However, these schools only have about 30 students each; they are apparently limited to the number for which the government is willing to guarantee employment. Well-trained encadreurs and animatrices are needed in support of non-formal education activities, such as the Radio Rurale and Youth Club efforts, if these projects are to get the kind of technical support they require.

At the arrondissement (or zone) level the agricultural extension agent should be trained through the moniteur level (there has not yet been a facility established to produce monitrices). There is one school for moniteurs at Porto Novo where five different specializations are offered; the candidate should have at least four years of secondary school to be eligible for admission to the program.

Recommendation: While there may be some advantage to expanding the training facilities for male and female agricultural extension workers in Porto Novo and Sekou, careful consideration should also be given to establishing facilities in the northern parts of the country to prepare there, in place, the agricultural extension agents which that region needs. The existing schools in the south might need to be somewhat enlarged to satisfy the needs of the three coastal departments, and perhaps even Zou, but those who will be working in the north should be trained there.

If AID were asked for assistance in the training of animatrices and encadreurs, and perhaps even of monitrices and moniteurs, it is recommended that sympathetic consideration be given to providing such assistance especially in the northern part of the country. Nationals and foreigners in Dahomey repeatedly noted that once the people moved into the south it was almost impossible to get them to return to the north again. If that is true, then that is an additional reason why training should be given in that northern region which continues to have substantial agricultural promise, especially in view of the areas in the northwest which will benefit from the Oncho control program.

For the animatrices and monitrices training programs, neither marriage nor pregnancy should be disqualifying factors--in fact qualified married rural women should be deliberately recruited to measure the results of these students in comparison with the unmarried candidates now being trained. For the latter group marriage and pregnancy are major problem areas, both in terms of recruitment and dropping out. Furthermore, once the female agricultural extension worker marries, she is usually obliged to follow her husband, which often means giving up her own career. If she is married and settled in a rural area it is most likely that if her husband objected she would not enter the program to start with.

Other conditions for providing an enlarged agricultural extension agent training capability would be a commitment by the government (or its parastatal agencies) to employ the successful products of these programs, and to undertake through the ministries concerned, the parastatal agencies, or the CARDER's to develop procedures which would ascertain that the materials which the agricultural extension agents need to function effectively will in fact reach them when and as required. The agricultural extension agents should also be provided with some minimum effective means of transportation so that they can actually cover the areas for which they are responsible. Some means should also be instituted for checking-up on the agricultural agents to determine if they are in fact performing the services they are assigned and if they are doing them well.

B. Rural Radio: In Dahomey UNDP/FAO have sponsored the Rural Radio Program which includes between 500 and 700 radio clubs with between 14,000 and 18,000 members. In addition the German Government is setting up a second transmitter with a building and equipment which will be completed by the end of 1975.

The broadcasts are for one hour per day Monday through Friday with ½ hour in each of the 13 broadcasting languages (Fon, Adja, Yoruba, and Mina in the south and Wama, Dendi, Ditamari, Bariba, Pila and Peulh in the north). The broadcasts are between 6:30 and 7:30 p.m. (the least bad time according to UNDP experts). The subjects covered in the broadcasts are determined 80% by the Ministry of Rural Development and 20% by other ministries. Twice

a week broadcasts are made to youth clubs in 4 languages. While it is difficult to determine the impact of the broadcasts, small surveys in the Fon and Bariba speaking regions show that 57% of the people are listening. In 1968/69 the first radios were placed in villages in support of Radio Clubs. While this practice continues, it has been estimated that in the south 11 out of 100 people own their own radios while in the north the figure is nine out of 100. Furthermore, "individual listening" in most of Africa really means that a group of people are listening along with the "individual" who possesses the radio.

Villages are selected for radio sets by the departmental agricultural officer. These officers are supposed to know which villages deserve to be chosen. A radio club representative is selected by the village and sent for a one to two day training program which deals with subjects such as how to establish a club, how to keep it active and how to make it progress. UN officials have found that if a club accomplishes nothing during the first year, chances are that it never will and therefore the radio should be moved to some other village site. While the clubs are supposed to have a meeting place, many of them do not. The broadcasts are backed up by posters, and while a Swiss group publishes a paper in the northern part of the country, this does not occur elsewhere. The radio representative in the villages provides feed-back on how the programs are being received by the village audiences.

Those working with the radio clubs are trying to achieve a more integrated approach to rural development by having the broadcasts coordinated with agricultural extension agents' work, with the youth 4D Clubs, with the literacy programs, etc. Advisors to the Radio Clubs point out that the people are supposed to listen, discuss, and then act. Provided that the village has some drive, chances of solid results depend upon a cooperative rural extension worker who is backed up by his superior extension worker (the encadreur and moniteur levels). Roughly speaking, about 1/3rd of the clubs are good, 1/3rd are average and 1/3rd are poor.

Recommendation: There is practically unanimous agreement among Dahomean and foreign technical assistance officials that rural radio is making a meaningful contribution to rural development and that it has the potential for doing a great deal more.

Given the Peace Corps' commitment to Dahomey and their programs in rural areas, AID might wish to solicit Peace Corps participation to evaluate the rural radio efforts and to determine how effectively it works. Studies could also be conducted on how much effect program changes would have on performance and on the impact of new media components in support of the radio programs (e.g., a weekly or bi-weekly newspaper, notebooks, slide-tape presentations, supervised practical exercises, etc.)--in fact a multi-media integrated approach. Naturally this should be coordinated with the complex of ministries and foreign donors who have already participated in getting the radio effort established, but it is recommended that the AID/PCV focus be in the northern or northern and central regions of the country.

Furthermore, the radio program efforts should be more effectively integrated into other developmental efforts, including those of the ruralized schools where possible, and should be goal (and product) oriented. There should also be a major effort to make the feed-back loop more effective to make the farmers fully realize the importance of their participation. AID may also wish to make its participation dependent upon the continued participation of other donors, especially UNDP/FAO, who apparently are preparing to end their assistance to rural radio in view of the government's reluctance to contribute more to the project's development.

C. Rural Youth or 4-D Clubs: The objectives of these clubs are, broadly speaking, to carry out educational and training programs directly linked to the economic and social needs of the individual as a farmer or as a member of a cooperative. In 1970 there were 85 of these clubs and by 1972 there were 150 with a total of 2,200 members. Each club has from 20 to 40 members who develop a farm with the help of a supervisor who also serves as an agricultural extension agent. (Occasionally the agricultural extension agent becomes so involved in one or two clubs that he fails to provide the extension services he should to the rest of his assigned area). The clubs form a self-help type of program with the land donated by the local villages, and the more established clubs assisting newer ones with equipment and supplies. One of the important reasons for the existence of these clubs is that they provide a means for helping rural youth who have not been able to benefit from the formal education/training system and who, in view of existing conditions and practices, will not be able to benefit from it in the foreseeable future. In the best circumstances the clubs become an integral part of a comprehensive rural community development and modernization program which covers agriculture, education, health and nutrition, but many of them must function as relatively independent innovative units simply proving that agriculture can be profitable and can provide for an acceptable style of life.

The IBRD is prepared to launch a project which would assist and reinforce the 4-D Rural Youth Clubs. The project will select 100 existing clubs to receive basic and/or specialized equipment and water supply facilities and build seven supply centers (Centres d'Appui) for these clubs. The project will also study existing channels of agricultural/rural credit in order to determine the most appropriate system to operate a "revolving fund" aimed at financing the initial establishment of the youths leaving the clubs. The project will recommend terms and conditions for making such loans. The IBRD is also interested in finding out what other kinds of agricultural services are needed to assist the youths to become established profitable farmers. A second major component of the IBRD project will provide for a Skills Upgrading Center to provide skill upgrading needs for the small private industrial sector, the public sector, and self-employed workers. The center would provide courses, staff, technical assistance, and equipment.

Recommendation: At this point, AID intervention in the 4-D program might be premature. The IBRD-supported program should be carefully followed in order to determine how effective a model it is and whether or not it could be applied elsewhere in the region. A major problem which IBRD may or may not address effectively will be the provision of assistance to help the "graduates" of 4-D Clubs to become established either on their own farms or as members of a cooperative. Once the IBRD approach is determined, AID might wish to experiment with some other approach. For example, one or two of the most successful 4-D Clubs (which are, incidentally, assisted by PCV's) have initiated a policy of trying to help their "graduating members" become established farmers. One of the things the clubs are doing is permitting former members to use the club's machinery, or milling facilities, or marketing arrangements. Active members may also be willing to provide labor to help the former members with initial land-clearing, building construction, and so forth. This "alumni group" may or may not form a cooperative but regardless of this, they may be able to depend upon club finances for assistance from a revolving fund for agricultural loans.

There may be two potential problems involved in this approach which further investigation could clarify. (1) UN personnel remarked on more than one occasion that the clubs are becoming politicized. This may or may not interfere with their mission, but if it does then they would cease to be an appropriate channel for AID intervention. (2) There is already a land-shortage problem developing in the southern departments so that former club members are being forced to go farther and farther away from their homes and clubs in order to find land available for farming. If the club alumni get so far away it becomes impossible for club members and facilities to be effectively utilized or for the club's influence to exert itself on the former member's agricultural and financial practices. Thus a geographically detached alumnus may not follow the agricultural practices the club supports and he may not honor the financial obligations to the club. On the other hand, if a group of alumni were to move away together it might provide an excellent opportunity to form them into a cooperative in the detached environment. Land pressure problems existing in the south do not apply in the north and therefore this factor should not inhibit the development of club centered programs in the northern region.

D. Other:

1. Cooperative Activities with the Peace Corps: The Peace Corps has carried out an impressive animal traction program in the northern region which, after some five years, has reached a point of self-perpetuation and expansion. In the Atacora (or Atakora) project area there are over 500 farmers using animal traction and the activity is spreading throughout the area. AID might wish to assist the Peace Corps in projects like this which are targeted rather than dispersed efforts. Whereas dispersed projects tend to disappear without a multiplier effect, a concentrated (even low-cost) effort, such as the animal traction project in Atacora, could make a lasting impact. Furthermore, PCV's could document their experiences, which could form the basis of guidelines in dealing with similar innovation efforts in other areas.

2. Cooperation/Assistance with Specialized National Agencies: There was general agreement in Dahomey that SONACO was a dynamic, innovative organization which had succeeded so well that its mission expanded from cotton production and commercialization to supervision of regional development programs in Zou, Borgou, and other areas. It is difficult to ascertain the longevity of such a "special agency" which was created, as indicated in the introduction, to by-pass and circumvent the inefficiency and red-tape-bound ministerial bureaucracies. However, when these specially created organizations are functioning effectively, AID might well consider assisting them in their efforts to introduce changes into the system. In this way AID per se does not have to assume the burden for trying to push innovation through a clogged and resisting bureaucratic structure.

Because the innovative organizations may not be completely institutionalized i.e., not be recognized as part of the permanent bureaucratic structure, AID objectives in association with these organizations should be rather specific and short-to-middle term in duration. AID should not become preoccupied with trying to preserve or perpetuate these institutions. On the other hand if they do survive but become ossified, AID should cease to try to use them as innovative instruments. However, while they possess the dynamism to achieve their goals with governmental approval, albeit outside of the standard structure, AID should take advantage of these indigenous energies and efforts to achieve change. SONACO is at present the organization in Dahomey with which AID should consider working in promoting rural development. Such cooperation could be in support of development in a specific region or in training and increasing the effectiveness of agricultural extension agents. The variety of activities which could be undertaken, and the opportunities for integrated developmental approaches, are significant when working with an organization with the scope of SONACO.

DAHOMEY

HEALTH SECTOR ASSESSMENT

1. Major Health Problems

Dahomey's health problems are, by and large, the same as in the other countries of the region. Yaws, which has been cleared from the northern half of the country, is still present in the south. Leprosy remains a serious problem with 25,000-30,000 cases identified. Trypanosomiasis is by and large controlled but occasional cases are reported from the north of the country. Onchocerciasis is prevalent in the Natitingou and Oueme regions. Schistosomiasis of the urinary variety exists, as cases show up at a regular interval but have not been identified in large numbers; malnutrition is a problem to a degree but in spite of the insufficient rainfall over the past few years, Dahomey has not been seriously affected by the drought in the Sahel region to the north. Food exports into Niger across the northern border was halted for a brief period and the number of nomadic herdsmen moving south towards central Dahomey in search of pastures was much larger in 1974 than ever before. Rainfall, however, was higher in 1974 than in previous years.

2. Health Infrastructure

The following table summarizes the physical resources of the infrastructure.

Hospitals	6*
Health or medical centers	34**
Rural stations or dispensaries	199
Maternities ***	66
Leprosariums	3
Special hospitals	2

*3 general hospitals and 3 secondary hospitals

**5 of these without beds. However beds in these institutions are largely there to make it possible for the patient to stay overnight or for very short periods. Equipment and medicines--as well as competence at this level, does not permit any more elaborate treatment.

***The maternities may be attached to a hospital, to a health center or be independent.

In 1968	Health	Services	received	12	percent	of	the	National	Budget
1972	"	"	"	8.46	"	"	"	"	"
1973	"	"	"	10.40	"	"	"	"	"
1974	"	"	"	10.60	"	"	"	"	"

75% of the budget goes to personnel.

The 1974 national budget was CFA 13,605,399,000 and the health budget CFA 2,090,465,000, which would give a percentage of 15.36. Health receives the third highest allotment after Education and Defense.

The Dahomey officials stressed that 12 health centers with beds for hospitalization and full equipment were part of the plans to occupy some of the Dahomey physicians trained abroad and due to return to the country in the next 2-3 years. The cost of this program was estimated at CFA 1.5 billion ($6,382,997). Another program concerns the creation of surgical blocs in dispensary hospitals to deal with industrial accidents. Two such facilities were considered at a cost of CFA 600 million ($3,829,798).

3. Personnel Availability

The table hereunder reflects the health personnel availability:

Health Personnel - Dahomey 1974

Category	Public		Private	
	National	French	Foreign	National
M.D.	45	25	4	14
DDS	4		1	
State Midwives)	195			1
Midwife AMA)				22
State Nurse)	888	22	6	
Nurse AMA)				
Pharmacist	6	2	4	16
Sanitary Eng.	3			
Sanitary Tech.				
Lab. Tech.				
Lab. Assist.				

There is 1 physician per 30,000 people. The total number of nurses is given as 910 without precise qualifications. It must be remembered that for an indefinite period of time, such nurses will have to act as physicians in many of their assignments.

Training. Physicians are all trained abroad, mostly in France or in Dakar and Abidjan. Pharmacists are trained in Dakar and France. Nurses and midwives are trained locally (no precise data), sanitary engineers are trained in Canada. The DAP consultant could not get any details on training programs.

4. Government Plans and Priorities

The health policies of the Government, as stated in the 1971-1975 plan are as follows:

a. Make the health services available to everybody (including the rural population).
b. Establish this total coverage of the country through both fixed and mobile services.
c. Develop preventive medicine rather than curative medicine.
d. Focus on mother and child services (PMI centers).
e. Develop environmental hygiene as part of community development.
f. Decentralize the services.

g. Give adequate training to all personnel.
h. Integrate all these activities.

As elsewhere one can distinguish the duties at the central level and at the periphery. The central level is largely dealing with conceptual work, outlining policies and giving advisory as well as supervisory services to the lower levels. However, the tendency is to decentralize and export to the periphery a large fraction of executive services under local authority.

There is a planning section in the Ministry of Health which responds to the demand for services from the whole country. A Planning Committee cooperates with the national planning organization. Health planners have been trained with WHO assistance and include two categories: professional health planners; and personnel trained through short courses. The first category of planner (two individuals) have been trained in Dakar, Brazil and Santiago, Chile, through WHO funding. The second category has followed the WHO training institute at Lome, Togo.

5. External Assistance

The usual roster of national and international donors exists in Dahomey. The most important are as follows:

FED - $3 million, mostly for hospital building
UN - $1.7 million, undefined
UNDP- $1.8 million, undefined
FAC - reported to provide considerable assistance in the form of physicians and equipment in undetermined financial amounts. WHO seems to be one of the most important donors. The following programs are funded by this organization.

Smallpox eradication - now in maintenance stage
Strengthening of Health Services (two physicians, one nurse)
Development of Health Laboratories (Teamleader M.D., one lab. technician.) To develop and improve laboratory services. Develop epidemiological services. Train personnel--- school for lab. technicians, 2 years.
Nursing Education: To plan nursing and midwifery services as part of the development of health services and prepare national nurses to assume responsibility for the services; to adapt curricula to the country's needs; and to train professional nurses and midwives and teachers.
Department of Health Sciences: To develop the department of Health Sciences of the University of Dahomey.

Dahomey also is part of an intercountry program in health statistics and malaria control and has received fellowships in a number of areas.

In 1971 the USAID awarded a contract to the University of California at Santa Cruz aimed at assisting the ministries of health in the Gambia, Lesotho and Dahomey to develop comprehensive mother and child health programs. The Dahomey part of the project is financed at $150,000. Cotonou serves as

the base for the project staff assigned to the three projects. In addition, two nurses are permanently stationed in Cotonou and are working as advisers to the Dahomey Ministry of Health in a model health care project near Cotonou and at a midwife training program.

The World Food Program has a doubleheaded project which consists of giving food to patients in hospitals and to community development programs at several levels. The savings the Government makes from these feeding programs is to be used for the construction and equipment needed for hospitals, health centers, etc., built with the help of the Food for Work Program.

6. Possibilities for AID Interventions

Given the paucity of information obtained and the impossibility of meeting with Government officials, no recommendations as to AID assistance to Dahomey can be made at this time.

ANNEX

DAHOMEY
NUTRITION PROFILE

POPULATION

Total: 2.7 million
Growth rate: 2.8 percent (6 percent in urban areas)
Rural population: 84 percent of total
Major tribes:

Dahomas (Fons) (850,000) - constitute a majority of southern population; primarily agriculturalists.

Adjas (220,000) - live in western section of country on banks of Couffo and Mono rivers.

Baribas (180,000) - live in the north; cultivate shea trea and kapok.

Yorubas (Nagots) (180,000) - settled in the east and in Porto-Novo, Ouidah, Abomey, Savalou.

Aizos (100,000) - comprise majority of population around Cotonou.

Peuls (70,000) - practice animal husbandry; traditionally nomadic but some becoming sedentary.

Samoas (100,000) - settled west of Atacora Mountains.

AGRICULTURE

Major Crops:

Corn	216,000 tons in 1971
Sorghum and millet	130,000
Rice	22,000
Sweet potatoes & yams	1,152,000
Manoic	1,170,000
Pulses	27,000
Palm oil	40,000
Peanuts	65,000

Corn is cultivated in both north and south but the most important areas of production are Porto-Novo, Ouidah and Athieme. Several varieties are grown, maturing at different times. Sorghum is the staple of northern Dahomey. Millet is grown especially in the regions of Abomey, Boukoumbe, Kandi, and Djougou. The cultivation of rice is not widespread but the Government is promoting it in an effort to decrease reliance on imports. Both dryland and

irrigated rice are grown. Manioc is cultivated in central and southern Dahomey. Sweet potatoes are grown mainly in the south and yams are replacing manioc as the primary staple in the north. Pulses are distributed throughout the country. A variety of fruits is grown in Dahomey, including citrus, bananas, pineapples, mangoes, papayas, guavas, and mangosteens. Palm oil is Dahomey's major cash crop and about 25,000 tons are used domestically each year. Peanuts are also produced for both export and domestic consumption (10,000 tons per year).

Livestock and poultry:

Cattle	590,000 head in 1970/71
Pigs	30,000
Sheep	580,000
Goats	620,000
Poultry	1,900,000

The presence of tsetse flies in the south, the erratic water supply in the north, the absence of market inducements, the low purchasing power of the population, the divorce between agriculture and animal husbandry imposed by tradition, climate and biological circumstances, the transportation difficulties, the lack of refrigeration and other constraints limit livestock raising to a subsistence activity wherever it may occur.

General:

Cooperative development is being supported by the Government but is slow to gain acceptance with the farmers. A National Society for the Rural Development of Dahomey (SONADER) is aimed at modernizing agriculture. It can, if necessary, initiate its own agricultural development projects or assist the Department of Agriculture in this respect. In the past, SONADER has concentrated on palm oil production. Other scientific establishments, such as an experimental farm at Ina, are concerned with improving production and yields of corn, peanuts, millets, yams and corn. The Government is involved in the development of the Oueme Valley, a promising area for corn, pastureland and freshwater fish. Under the Ministry of Rural Development and Cooperation a strong effort is being made in extension in the six departments of the country.

Storage:

Central storage is minimal. Village level storage is traditional and losses due to spoilage, insects, fungi, and rodents are considerable.

FISHERIES

Maritime fishing includes both traditional native fishermen and an industrial fishing fleet. About two-thirds of the artisanal catch is dried or smoked and about one-fourth is exported. The waters of the lagoons and rivers are at present Dahomey's most important sources of fish. Lagoon fishing is very important in lower Dahomey where these bodies of water cover 20,000 to 30,000 hectares. River fishing is pursued primarily on the Oueme and the Niger. Some of the freshwater fish are exported.

SEASONAL AVAILABILITY OF FOOD

There is a decline in cereal consumption at the end of the dry season, corresponding to an increase in the price of corn, and, unfortunately, occurring the moment when agricultural work is developing with the greatest intensity.

DIETS

The basic diet is supplied by manioc, yams, groundnuts (peanuts), beans, corn, palm oil, and fish. It has been estimated that these staples furnish an average 2,000 to 2,500 calories per day to the consumer. However, wide fluctuations exist between regions and between social groups.

In the north the diets are strongly based on cereals such as millet, sorghum and fonio, while in the center, a transition zone is marked by a greater emphasis on sweet potatoes and yams. The sources of animal protein are much poorer in the north. No fish is available, poultry only to a very modest extent, and game only occasionally. Meat consumption is greater in the cattle zone although, as in most of the region, the nomadic herdsmen do not slaughter their animals for meat on a regular basis. However, they do consume some meat from the occasional animal which dies from natural causes and they regularly obtain small quantities of milk from the cows.

In the northwest, a land of famine, the problem of food shortages is chronic, even in normal times, and becomes acute during droughts. In this area, the carrying capacity of the land has definitely been exceeded by a growing population settled on very poor soil. Corn is the basic cereal in this region, and sorghum is also consumed.

In the south the diets are better than in the north, and a wide variety of foods is available which supplement and substitute for each other continuously. Cereals, including corn, are grown, an unusual feature in a forest area, and even rice is available in modest amounts. Beans, yams, manioc and sweet potatoes are the main crops. Palm oil is used for cooking. The waters of the lagoons, rivers and the ocean provide fish and shellfish which supply protein in addition to that derived from livestock.

No systematic nutrition surveys have been made in Dahomey so indicative information on caloric, vitamin and mineral and protein adequacies is unavailable. However, it appears that energy intakes in normal times are generally below satisfactory limits and clinical signs of protein, vitamin A, iron and iodine deficiencies have been observed.

NUTRITION PROGRAMS

A school lunch program was in effect in 1968, benefitting only 5,000 children. Preparation of weaning foods is demonstrated at Mother and Child Care Centers. There is a Dahomean Section for Food and Applied Nutrition (SANA) located at Porto-Novo.

DAHOMEY

POPULATION AND FAMILY PLANNING

In the past years, the former Administration of Dahomey had given considerable recognition to the problems of rapid population growth as it affects national development. The 1966-70 Five-Year Plan remarked that the rate of natural increase was seriously inhibiting an increase in the standard of living. In 1969 the government requested the consultation of the Population Council in formulating a demographic policy. The present Revolutionary Government has no official population policy and has apparently not perceived the need for any concern over the 2.8% annual increase. The most current official source of demographic information is the 1961 sample survey conducted by INSEE, which the government now disregards as being inaccurate and out-dated. Individual sectors are left to determine the implications of population on their development perspectives.

In the first decade of this century, the French colonial government instituted the practice of administrative "censuses". From 1910-23 this system reported national population figures fluctuating between 8-900,000. This system was improved and regularized so that between 1924-56, complete national coverage was assured every five years. During this period the population increased at approximately 2% per annum. The 1961 sample study was for the most part insufficient and inaccurate but was considered as only the beginning of a continuing series of demographic studies (Table I). Results from the sample did indicate that between 1936-56, population growth was probably much slower in the North than the South, and instead of 2% was probably 1% in that area. The only surveys since 1961 have been localized. The 1964 census of Cotonou and several rural surveys connected with agricultural development projects suffer from the same technical errors of collection as the national sample and provide little information of further value to earlier results. Dahomey intends to conduct a 100% national head count under the African Census Program. A pretest of the questionnaire was scheduled for May 1975, with the enumeration taking place the following December. The government, however, has just recently formed the Census Advisory Committee which will make the final decision on the questions to be included and the follow-up samples. Training of interviewers has not begun and the earliest possible date for the census is now considered to be mid-1976.

For Dahomey, as for most African countries, migration is the least known factor in the population equation. There have been no recent studies on either internal or out-migration. Although there appears to be considerable temporary movement, the population of Dahomey has been regarded as one of the least mobile in Francophone Africa. Even the rate of migration to urban areas is thought to have risen only slightly throughout the past decade. Although 58% of the population occupies some 12% of the land within an approximately 200 km-wide band along the coast, this concentration is more a historical phenomenon than the result of any recent large-scale movement. Migration has not been considered to be of significant effect on the age structure.

The government has no official policy concerning fertility, and in terms of the Ministry of Health's program, the official emphasis is on births. Nonetheless, family planning services are available through government facilities in Cotonou and Parakou. Contraceptives are available in pharmacies without a prescription at prices which restrict their purchase to a minority (1 cycle of orals, $1-2; one tube of cream, $2; 12 condoms, $1.75). Private consultation for an IUD insertion is "extremely expensive." A private family planning organization was founded in 1971 and with the aid of Pathfinder and IPPF has established a free standing clinic in Cotonou and maintains field representatives in each province. The Minister of Health is the honorary president of the association.

The future emphasis of the Health program will be on the extension of preventive health care to the entire rural population. The Minister of Health is believed to consider family planning an essential part of preventive services and subscribes to the popularization of the program. A national Maternal and Child Health policy is being formulated which should reveal the commitment of the MOH to official government-provided services. The Director of the University Maternity Hospital in Cotonou is preparing a proposal for the construction of a Family Health Center on the hospital grounds, which he envisions will serve as a training center for medical and paramedical students from all Francophone Africa. UNFPA was officially informed of this proposed center and has promised to send a consultant to investigate the potential. The private association is seeking funds to train local personnel in family planning referral and information/education. They will continue to rely for the most part on the expectation that government services will evolve to meet this need.

Attitudes towards sexuality according to the CNDPF are changing rapidly. The older generation of Dahomeans holds to the strict traditional attitudes towards family and sex, while educated young adults are regarded as pursuing the "depravity" of their European counterparts, according to a survey conducted by the association. It is estimated that in 1972, 70% of the births in rural areas and 38% in urban areas were delivered at home. Sexuality is still considered a secretive matter among older women and knowledge of human physiology and reproduction is minimal. With the changing mores of the younger generation, CNDPF has endorsed formal sex education in public schools. As an indication that the teaching of sex education does exist in the curriculum of secondary schools, observers have noted that two questions on the national final exams are concerned with human reproduction. Three Peace Corps Volunteers are involved in a trial health education project for primary schools which, with the permission of the Ministry of Education, will include elemental sex education on a non-formal basis. The private association has been requested to develop a family planning education curriculum for inclusion in the agricultural training program for youth.

TABLE I: THE POPULATION OF DAHOMEY

Population (000)	INSEE Survey 1961	Dahomey Statistics Annual 1969	WHO Estimate 1969	Min of Rural Development 1971	Bu Cen Estimate 1972	WHO Estimate 1974
Total	2,082.1	2,576.0	2,554.6	2,972.0	2,861.9	3,015.0
0-14	1,958.1	1,190.0	1,175.4		1,274.6	1,387.2
15-64	1,007.9	1,240.0	1,236.5		1,493.8	1,514.9
64+	116.4	144.0	142.8		93.5	112.9
Rural Population				2,447.0	2,461.2	
% Active				48.4	52.2	
% School Age (Primary 6-13)				20.0	20.8	

Rates	Range from Sources other than Bu Cen	Bu Cen
CBR	49-54	51.3
CDR	26-28.4	25.9
National increase	2.5-2.8	2.5
GRR	2.9	3.5
e^o male	37	37.9
e^o female	37.5	40.6
TFR	6.4-7.2	7.1

DAHOMEY

ECONOMIC DEVELOPMENT OF ONCHOCERCIASIS-FREE ZONES

Date Spraying Begins: October 1976
Date Settlement May Begin: April 1978

I. Onchocerciasis Vector Control Program Area

Although onchocerciasis is endemic throughout Dahomey, only the northern portion of the country (the departments of Atakora in the northwest and Borgou in the northeast) are included in the program area. Onchocerciasis is hyperendemic only in the NW portion of the country principally along the valleys of the Sota, Mekou, Pendjari and Alibori rivers. Other areas of Dahomey are included in the program basically as control zones against reinfestation of Simulium. As in other coastal states of West Africa, the North of Dahomey is less developed than the South and until the recent past has suffered from relative government indifference. However, under the leadership of Gen. Kerekou, himself a northerner (from Atakora Province), new development initiatives are planned for the North which contains 2/3 of the land surface, but only 1/4 of the population of the country. Only in the extreme west of the region, near Boukombe, do population densities (41-130 inhabitants/km^2) begin to rival population/land pressure in the southern parts of the country. The three coastal departments average between 102-133 inhabitants/km^2. Largely because of ethnic differences complicated by traditional rivalries and tribal strife, mobility between regions (especially south to north) is very limited and relatively fertile lands in the northern and central regions remain unexploited.

The North can be divided into two sudanian climatic zones. The area north of the Atakora mountain range receives approximately 850-1000 mm of rainfall annually while the mountains and areas to the south enjoy up to 1200 mm of rainfall. Soil maps indicate that between 40-80,000 hectares of relatively good soil are not farmed in the North. Despite the availability of land, a large portion of young men migrate south to urban centers at least temporarily.

Cereals, ignames and groundnuts are the traditional agricultural products of the north. Yields, quite sensitive to variations in rainfall, are generally low: 300-400 kg/ha for cereals; 400 kg/ha for groundnuts. Almost half of Dahomey's cattle are found in the two northern departments.

The North is inhabited by several ethnic groups, notably the Somba, Bariba, Tanguieta and Dendi, most of whom have proven quite open to new methods of agricultural production. Animal traction and cotton production have caught on rapidly in the Atakora and Borgou regions respectively.

II. Onchocerciasis-Free Economic Development Zone

Although a certain amount of vacant land with good soil has been identified in the program region, the PAG mission felt that, in light of

ongoing projects in the North, no new projects tied to the onchocerciasis program should be initiated. Those areas in the North which are over-populated, such as around Boukombe, do not neighbor the valleys which will be cleared of onchocerciasis and those peoples living near the valleys (often of different ethnic groups) are not constrained by land pressure and have no inclination to settle the valley. Serious sociological problems would be likely if people from the Boukombe area were settled in the valleys.

Past and Present Development Activities in the Program Area

In 1968, FED financed a major integrated rural development project in the Atakora region. The project attempted to expand cotton and rice production and improve farming techniques for groundnuts and cereals (use of fertilizer, improved seed, group ag-plots, etc.). FED dropped the project in 1971 due to disagreements with the government on project design and an apparent lack of government counterpart support. Meanwhile, UNDP and Peace Corps continued highly successful animal traction projects in the Atakora. Recently a Centre d'Action Regional de Development Rural (CARDER) was established in the Atakora region and a new integrated development project has been designed. FED apparently has agreed to fund part of the project but is looking for other donor assistance.

In the Borgou region, FAC with CFDT and CIDR technical personnel has financed a major cotton and rice production project for several years. The project, whose benefits have spilled over into the neighboring areas of the Atakora, has increased cotton production in the North from 6,000 tons in 1965-66 to 47,000 tons in 1971-72. IBRD has agreed to support a new project in Borgou which will incorporate the FAC activities within a broader integrated rural development framework.

III. Development Strategy

A. PAG Recommendations

As noted above, PAG did not recommend any new projects in the onchocerciasis program area of Dahomey since several major projects were already underway or under study and serious sociological problems would hamper resettlement operations.

B. Government Development Plans and Progress to Date

The government does not appear to be planning any onchocerciasis-related development projects in the North. Nevertheless, the Dahomean government has asked UNDP to undertake basic mapping, hydro-geological and pedalogical studies in the onchocerciasis program area.

IV. Recommended AID assistance over the next 5 years

AID should consider development assistance in the onchocerciasis regions of Dahomey only within the context of broader integrated rural development schemes. However, present AID policy precludes bilateral grant assistance to Dahomey in agriculture and/or livestock.

Conclusions and Recommendations

The time when the present government will arrive at the conclusions of the former administration concerning the impact of population growth on development is difficult to predict. The government appears to be in a period of indecision regarding the final form of the revolution. Most recently the president announced the realignment of the National Revolutionary Committee with a criterion for membership that would exclude most technocrats and intellectuals; and an intention to follow a Marxist-Leninist course. A National Planning Seminar was held in August, but as of mid-November the results were not available due to a lack of the necessary political decisions. An economic planning project sponsored by UNDP has failed for similar reasons. The results of the national census and follow-up demographic survey will not be available before 1978. If the present government attitude persists, there appears to be no opportunity for a demographic-impact approach to national planning. Migration and urbanization research, in part covered in the census, is much needed, as most of the present attitudes are based more on impressions and out-dated information. For the immediate future it seems necessary to take a "wait and see" attitude until the present instability of the political situation has settled and a course has been firmly set.

In the absence of a reversal of the government's permissive attitude, family planning can be expected to continue to expand on a low profile basis, but will be inextricably tied to a general restructuring and extension of MCH and preventive health services. A direct bilateral involvement of population funds would probably demand a greater commitment by the government than can be expected at this time. Any involvement in a Dahomey-centered regional project must for the most part also stand on its local merits and should be considered only after a favorable governmental attitude is confirmed and regional participation is assured.

IVORY COAST
MACRO-ECONOMIC ASSESSMENT

The Ivory Coast's spectacular growth performance in the 1960's, averaging 7.5 percent annually in real terms, has given the country a per capita income of $349 in 1972. The growth rate dropped slightly in the early 1970's to 6 percent in real terms, reflecting the substantial decline in the terms of trade. (See Table I for sectoral growth rates and contributions to GDP.) The traditional driving forces of this growth have been and continue to be agricultural exports. Coffee, timber and cocoa averaged 69 percent of exports between 1970 and 1972, down from 80 percent in the late 1960's, owing to a diversification program. Industrial enterprises have developed in areas of import substitution and processing of agricultural and forestry products. Thus, Ivory Coast has one of the more diversified economies in the region, based on diverse agricultural production as well as industrial processing capacity. However, much of the economic activity continues to be dominated by foreigners, and the distribution of the benefits of this growth has been far from even. 1/

A. Sectors

Agriculture has had a mixed development. While subsistence farming has grown slower than population (about 2 percent), industrial, export and forestry exploitations have witnessed far more rapid growth. Beginning in 1964, a campaign was begun to diversify production away from coffee, cocoa and wood, but only in the last few years have the results become visible in increased pineapple and oil palm products exports. Regional development has been uneven, with the North and the Southwest lagging behind the rest of the country's growth, increasing inter-regional as well as inter-sector income disparities. This difference in regional incomes has induced a large migration flow to areas of higher productivity, and an increasing level of urban open unemployment, which in the last year has fostered a policy of expelling unemployed foreigners (mostly Voltaics) from urban areas. Foreigners are still important in plantation areas, however. (See Table II.)

During the decade 1960 to 1970, industrial production underwent great growth and transformation, so that the value added by the secondary sector (including artisan and building) increased from 16 percent of GNP in 1960 to 25 percent in 1970. (See Table I.) Value added at factor cost increased over 15 percent per year during this period, concentrating in import-substitution industries geared for the size of the Ivorian market, and in the increase of natural resource exports. The diversity of growth provided Ivory Coast a broad industrial base and a market for semi-finished products. This growth has not been without problems, however, principally in the participation therein of Ivorians. In the modern sector overall, in 1970, non-Africans occupied 90 percent of positions in management and 80 percent of supervision and foremen and technical skills; Africans have a majority

---

1/ The value of the CFA franc has shifted in terms of the dollar from $1=CFA 223 in October, 1974 to $1=CFA 208 as this went to press in March, 1975.

of positions only at lower levels, but even here non-Ivorians hold 46 percent of overall employment, versus 48 percent for Ivorians. With 6.3 percent of the modern sector labor force, non-Africans earn 41 percent of wage and salary payments, while Ivorians, with 48 percent, earn only 32 percent of income; non-Ivorian Africans earn even less. The Ivorianization of the country's industry to correct this mal-distribution of the benefits of growth is a primary concern to the government.

B. Fiscal Performance

Like most governments of the region, that of Ivory Coast disperses much of its revenues on personnel; 69 percent in 1974. In Public Works, this rises to 84 percent, with only 16 percent of the budget devoted to material, while perversely, only 56 percent of the education budget is devoted to personnel. During the 1960's, government personnel increased at 7.5 percent per year, which is probably greater than the government's personnel requirements; this is partly due to the political pressure on the government to employ its citizens, particularly graduates. It will be difficult to curtail personnel expenditures. An austerity program due to overall resource constraints facing the government has reduced overall expenses, probably at the expense of government effectiveness.

Since 1972, the government has attempted to increase tax revenues by an increase of the tax base rather than an increase of rates, although much of the gain to the 1974 budget comes from a one point increase in the value-added tax. Indirect taxes are the government's single largest revenue source, due to the difficulty of direct tax collection.

The Ivory Coast receives few soft loans. IDA assistance will be given in the next fiscal year only to a sewage system for Abidjan and for credit to the agricultural development bank, where small farmers cannot pay the prevailing interest rates for inputs. This hardening of loan terms has led to an increase in debt service costs to the government, and hence to a rigidity in the balance of payments. The IBRD suggests that the rapid increase in external indebtedness reflects the rapid increase in the Ivory Coast's absorptive capacity, though the terms and conditions of some loans appear inconsistent with the characteristics of viability of the project--examples of this are certain investments in tourism, and the current project of the government to build a new wholesale market 11 km. outside Abidjan.

1. Balance of Payments

In 1973 Ivory Coast's exports consisted primarily of coffee, cocoa and wood, representing 75 percent of total value of exports versus 82 percent in 1968. (See Tables III and IV.) This slight diminution in share is indicative of the slow response to the country's attempt to diversify its exports: fresh bananas, pineapple and its products, cotton and its products,

and oil palm products represented 10 percent of total exports in 1973, against 9 percent in 1968; although bananas decreased in 1973 after an 89 percent increase from 1968 to 1972, others continued a strong increase from 1968 to 1973: pineapple, 184 percent, cotton, 140 percent (of which: fabrics 220 percent); palm products increased from virtually nothing, increasing 132 percent in the last two years alone. The world-wide economic slowdown may slow this growth. After a particularly good year last year, wood exports have decreased greatly in 1974, according to a timber exporter. Coffee has temporarily been withheld from the market to try to resist the world price decrease now occurring in this crop, with resulting balance-of-payments difficulties appearing. The IBRD is currently planning an integrated rural development program in the North which may increase cotton production at the same time as foodstuffs production is increased: its expert points out that 30 to 40 percent of palm production is on a village level. Development of this export should help the regional distribution of income greatly, barring a long-term decline in palm oil prices.

Imports have remained fairly stable over the years to 1972. (See Table V.) Food, beverage and tobacco imports are increasing both in absolute and relative value, as are petroleum products; both are largely at the expense of semi-finished products. France is the largest supplier of imports (47.1 percent versus 6.9 percent for Germany and 6.1 percent for the United States), as well as the largest client (29.1 percent of value of exports, versus 13.9 percent for the United States, 10.8 percent for Germany and 10.6 percent for Italy).

Using fairly crude figures, one can see that the terms of trade will go against the Ivory Coast quite strongly during the next years, if the IBRD Price Forecasts for Major Primary Commodities are any indication. To purchase the same import mix as in 1973 using Ivory Coast's 1973 output mix would require 19 percent more exports in 1975, and 55 percent more in 1980. Further, if one extrapolates the rate of growth of palm oil and other small but growing sectors, the picture becomes more dismal: it will take 63 percent more exports in 1980 to purchase the same volume of inputs. It should be stressed that these figures are very conservative, not only in the price estimates used, but in that the value of all outputs has been priced at that of the primary commodity, ignoring value-added in production, and even in estimating industrial exports the world price index has been used, the same index as for imports with a weight of 100 percent. In short, this index is biased to go down, and so can only be taken as indicative, and not necessarily a projection.

Despite last year's large balance of trade surplus due to temporary high prices of raw materials, the Ivory Coast will need foreign assistance to help keep an overall balance-of-payments surplus as these prices descend. The rapid increase in investment requirements of the economy have led to increased debt service payments, making the payments balance insensitive to government policy. The role of the Ivory Coast as a provider of employment

and welfare for the region, with the concomitant factor payments outflow, should be kept in mind in analyzing its balance of payments.

On April 1, 1974, Ivory Coast's foreign exchange reserves stood at 20.4 billion francs, representing 35 percent of the total foreign exchange reserves of the entire West African Monetary Union (UMOA). Due to the size of the economy, however, this represents only a little over one month's imports, and the economy remains very sensitive to fluctuations in prices of its principal export.

2. Human Resources

Pending a population census to be performed in March 1975, much remains to be known about the composition and distribution of the Ivorian population. The development of the country, concentrated in expatriate-managed industry, has led to great regional imbalances, resulting from and contributing to a rapid rate of rural to urban migration that exceeds the creation of modern-type job opportunities in the cities. The Department of Abidjan now contains 19 percent of the population and 73 percent of the salaried work force of the nation.

The Ivory Coast is growing at approximately 3.3 percent per annum, of which one percent represents net in-migration. The labor force is thus larger than would be the case in a naturally-growing population, due to the selectivity of this migration. Although no national data are available, extrapolations from surveys estimate that between 1965 and 1970, 40,000 migrants came annually to Ivory Coast, while internal migrations amounted to 38,000. This has led to conflict with the poorer Ivorians for available jobs, and expulsion of some foreigners from the urban areas. The SETLEF survey gives the following breakdown of wage and salary workers in agriculture:

Agricultural Workers:	Subsistence	Industrial	Other	Total
Ivorians:	15,800	79,700	300	105,900
Other Africans:	24,000	197,600	16,800	238,300

3. Government Priorities

In the 1971-1975 plan, the government signalled four chief difficulties with: (1) the economic conditions of growth, particularly commercial exchanges and the financing of public investment, alluded to above; (2) Ivorianization of business, employment, and administration; (3) education, training, and animation; and (4) redistribution of the fruits of growth. To finance growth through trade the government seeks diversification of exports, already analyzed, particularly through the increase in

domestic value added to exports. Export growth must be redirected toward the Entente and Ghana; the Plan specifically states that the desire for regional cooperation must be implemented. This often comes in conflict with the Ivorianization objective, although the state has been kept open to migrations from neighboring countries and the resources they bring Ivory Coast--with their price in repatriated earnings (estimated 8.8 billion francs in 1973).

The government of Ivory Coast has asked American assistance on the following projects, which presumably fit into their 1976-1980 development scheme. Their proposal includes rationalization of the marketing of transhumant livestock, grain storage, hydrologic studies, rain retention schemes, seed production, and agricultural training. These fit well into the 1971-75 Plan desire to spread the benefits of growth to the rural sector, and particularly to the North, which even more than the South/West, lags behind the rest of the country.

Such schemes would progress Ivorianization without forcing out foreign labor; further, the training component of integrated agriculture in the northern part of the country (as compared to plantation agriculture where most immigrant labor works--see the table above) would develop skills and attitudes more directly transferable to the migrant's home region that previously developed. Due to the migrant labor component, it is likely that such project would have externalities which would prevent the project itself from becoming auto-financing on a local level, yet would greatly assist development in the West African region as a whole, particularly elsewhere in Ivory Coast, in Upper Volta, and in Mali. Livestock holding area schemes would improve the well-being of Malian and Voltan herders, possibly leading to their eventual sedentarization, while the project costs may not be justified for hard-financing by the direct benefits accruing to the project. AID should study these projects closely to determine their externalities and their relation to a regional development strategy.

Although certainly not a bottleneck to overall growth, the problems of rural development and the redistribution of progress is becoming great for Ivory Coast, and important to the Entente and the entire regions due to the externalities so far resulting from this growth. The projects proposed by the Ivorian Government fulfill their own plan for integrated development at the rural level and for increased Ivorianization of the development progress, but at the same time have externalities on the region as a whole which would assist the integrated rural development in which AID should direct its resources. While certain projects, like grain stabilization, are candidates for strictly technical analysis, much research needs to be done into existing rural institutions which can be mobilized for rural development, and into the externalities arising from migrations and Ivorian development.

TABLE I - Ivory Coast

GROSS DOMESTIC PRODUCT AT FACTOR PRICES
(Unit: billion francs CFA)

	1968	1969	1970	1971	1972	1973*
Agriculture, livestock, forestry, fishing:	100.7	108.3	116.5	121.1	126.0	151.7
Industry:	44.5	51.1	42.7	49.1	57.9	67.2
Extractive	0.9	0.9	0.7	0.9	1.1	1.1
Manufacturing & Craft	29.6	34.1	37.7	43.4	52.0	60.5
Construction	17.9	20.5	25.0	30.3	29.3	32.2
Transport	24.5	27.6	30.9	37.0	42.2	46.2
Service & Commerce:	108.5	125.1	74.5	83.9	94.0	110.7
Gross VA, producer prices			289.8	321.5	349.4	408.1
Indirect taxes net of Subsidies: (inc. stabiliz.)			56.0	49.8	51.7	72.4
Import Taxes:			27.8	29.3	32.1	38.6
Gross Domestic Product	325.1	362.1	373.6	400.6	433.2	519.1

*Provisional

Sources: 1968-1968: IBRD, Current Economic Situation and Prospects of the Ivory Coast.

1970-1973: Min. du Plan, Les Comptes de la Nation, Res. Provisoires, 1973.

TABLE II

RESIDENT AFRICAN POPULATION AGE 15-59

	Ivorian		Non-Ivorian		Total		% non-Ivorian	
	1965	1970	1965	1970	1965	1970	1965	1970
Total	1792	1993	420	596	2182	2585	19	23
Rural	1439	1513	154	226	1593	1739	10	13
Urban	323	480	266	366	589	846	45	43
Abidjan	135	223	59	92	194	315	30	29

Source: SETEF, cited in IBRD Special Report on Employment, 1974

TABLE III - Ivory Coast

BALANCE OF PAYMENTS
(Unit: billion francs CFA)

	1968	1969	1970	1971	1972	1973*	1974**
Exports, fob	110.0	123.9	138.0		149.4	193.3	248.5
Imports, fob	84.3	95.2	120.2	n.a.	127.3	168.1	219.2
Trade surplus	25.7	28.7	17.8		22.1	25.1	29.3
Net Services	-16.7	-19.3	-23.9		-37.9	-38.4	-47.2
Net transfer payments:	- 5.4	- 4.0	- 3.3		- 3.7	-10.5	-16.8
Private	(- 9.2)	(- 9.3)	(-11.8)		(-17.4)	(-19.1)	(-24.6)
Central Government	(3.8)	(5.3)	(8.5)		(13.7)	(8.6)	(7.7)
Net capital, public & private	6.7	7.1	20.0		1.3	26.8	22.1
Allocation SDRs	-	-	-		1.5	-	-
Net errors and omissions	- 1.5	- 2.9	- 2.1		- 2.0	- 5.0	-
Overall surplus (-)	- 8.9	- 9.5	- 8.5		-18.7	- 1.9	-12.7

Source: IBRD (1972) and IMF (1974)

Table III (cont'd)

IVORY COAST: COMMERCIAL BALANCES

	Exports	Imports	Balance	Coverage
1960	38808	32364	6444	120%
1961	47118	41970	5328	112
1962	47693	38534	9159	124
1963	56818	41900	14910	136
1964	74501	58873	15628	127
1965	68418	58343	10075	117
1966	76659	63613	13046	121
1967	80263	65050	15213	123
1968	104890	77627	27263	135
1969	118223	86284	31939	137
1970	130190	107704	22486	121
1971	126558	110838	15720	114
1972	139541	114317	25224	122

Source: Evolution du Commerce Exterieur Ivoirien, 1968-1972
Commerce Exterieur de la Cote d'Ivoire en 1973

Table IV: Ivory Coast, Exports of Principal Products

(Billion F CFA)	1968	1969	1970	1971	1972	1973	Per cent: 1968	Per cent: 1973
Coffee	36.8	31.5	45.1	44.0	42.9	43.9	35.1	23.8
Soluble	(0.9)	(1.3)	(1.9)	(1.1)	(1.6)	(1.6)	0.9	0.8
Wood	25.8	35.1	29.3	31.0	37.9	65.7	24.6	34.4
Lumber,Plywood	(4.1)	(4.7)	(5.4)	(4.7)	(5.4)	(9.3)	4.2	4.9
Cocoa	24.0	32.7	32.7	27.3	28.8	34.0	22.9	17.8
Banana, fresh	4.6	5.4	5.6	5.9	8.7	3.0	4.4	1.6
Pineapple	2.5	2.7	4.0	4.5	6.0	7.1	2.3	3.7
Juice and tinned	(2.0)	(2.1)	(3.1)	(3.6)	(4.1)	(5.0)	1.9	2.6
Cotton & Fabric	2.2	2.6	3.0	3.2	5.0	5.3	2.1	2.8
Cotton fabric	(0.5)	(0.8)	(1.2)	(1.3)	(2.1)	(1.6)	0.5	0.8
Palm Oil	0.01	0.07	0.08	1.9	2.1	4.4	0.01	2.3
Sheanuts	0.37	0.45	0.65	0.69	0.58	*	0.3	*
Other	8.6	7.7	8.9	8.1	7.3	26.0	8.2	13.6
Total Exports	104.9	118.2	130.1	126.6	139.3	191.0	(100)	(100)

*Include under "Other"

Table V: Ivory Coast, Imports by Groups
(Unit: F CFA)

	1969	1970	1971	1972	Per Cent: 1969	Per Cent: 1972
Food, beverages, tobacco	12.3	16.4	16.9	19.7	14.3	17.3
Energy and lubricants	4.5	5.1	5.4	7.3	5.2	6.4
Primary materials:						
Animal and Vegetable	1.0	1.2	1.7	1.7	1.1	1.5
Mineral	1.3	1.7	1.9	2.8	1.5	2.4
Other semi-finished products	14.4	20.6	21.1	22.9	16.7	20.0
Finished agricultural prod.	0.6	0.7	0.6	0.9	0.7	0.8
Finished industrial products	25.0	30.3	30.7	28.4	28.9	24.8
Finished consumer goods	27.1	31.6	32.5	30.6	31.6	26.8
TOTAL	86.3	107.7	110.8	114.3	(100.0)	(100.0)

TABLE VI

GOVERNMENT BUDGET, IVORY COAST
(unit: million francs CFA)

	1973	1974	Percent 1973	Percent 1974
Total Revenues:	82782	97700		
Title I:	81143	95840		
Direct Taxes	16120	19530		
Indirect Taxes	61593	72860		
Registration and stamp fees	2980	3000		
Income. . .	450	450		
Title II: Receipts from Services	1479	1700		
Title III: Contributions & Operating Funds	160	160		
Title IV: Divers receipts	-	-		
Total Expenditures, except debt service: (II, III)	50499	57645	100.0	100.0
Personnel	34555	39958	68.4	69.3
Material	15944	17688	31.6	30.7
Ministry of Agriculture	1705	1855	100.0	100.0
Personnel	1321	1430	77.4	77.1
Material	385	425	22.6	22.9
Ministry of Public Works & Transport	1880	2274	100.0	100.0
Personnel	1568	1910	83.4	83.9
Material	312	363	16.6	16.1
Ministry of Animal Production	622	730	100.0	100.0
Personnel	434	500	69.8	68.4
Material	188	230	30.2	31.5
Ministry of Public Health	7363	8229	100.0	100.0
Personnel	4698	5383	63.8	65.4
Material	2664	2845	36.2	34.6
Ministry of National Education	4924	5799	100.0	100.0
Personnel	2582	3269	52.4	56.4
Material	2342	2530	47.6	43.6
Title I: Contractural Debt Service	1020	1200		
Title IV: Common Expenses of all Ministries	16139	19734	100.0	100.0
Title V: Transfers, net	15090	19121		
Total Expenditures: Titles I thru V	82748	97700		

Source: Ivory Coast, Government Budget, 1974

IVORY COAST

AGRICULTURE (INCLUDING LIVESTOCK) SECTOR ASSESSMENT

Agriculture has been the mainspring of Ivory Coast's remarkable economic growth since independence. The GDP, in real terms, increased by an average of 7.5 percent per year during the sixties, and, despite the decline in terms of trade, achieved a 6 percent growth rate in 1971 and 1972.

The impressive growth has been due primarily to a shift in the composition of production from low-value food crops to high value commercial crops. Coffee, cocoa and timber have been the principal export crops making up 80 percent of all exports in the late sixties. New export crops have been promoted with considerable success in recent years to diversify production. These include oil palm, copra, rubber, sugar, pineapple and bananas.

While some of the new commercial crops are being developed in large plantations, cocoa and coffee are typically grown by small holders, in farms of from one to five hectares each. An estimated 250,000 farmers grow coffee and 100,000 grow cocoa. Nearly one-half of all farmers in Ivory Coast grow one or both of these crops.

Export crops are grown principally in the south and east. The north, which grows primarily subsistence food crops, has not up to now shared in Ivory Coast's recent growth. The government is aware of the growing disparity between the north and the rest of the country, is now committed to a more rapid development of this region and has asked for USAID assistance. The northern region encompasses the Guinea-Sudanic zone, between the 8th and 11th parallel. It is here where the country's potential for cereals and livestock is concentrated. This paper will focus primarily on this region as the area of possible interest for USAID assistance programs.

The Major Problems

The major problems in the food sector are:

1. Slow growth in food production; failure of cereal and meat production to keep pace with demand and, consequently, increasing costs for food imports; and

2. Low levels of farm income in the northern food producing area, growing inequities in their incomes and levels of living compared with other areas.

Until a few years ago the GOIC stressed almost entirely the development of commercial and export crops. The efforts were favored by the availability of immigrants from Mali, Upper Volta and Northern Ivory Coast which made it possible to open up and develop the south and east, which were well suited for cocoa and coffee production. It has become apparent that this process cannot continue for, while there is still suitable land available for growing cocoa and coffee in the east and south, new immigrants have been encroaching on the already established farmers. The government has begun opening up the southwest, which is also suited for cocoa but with higher development costs.

Meanwhile, there has been little growth in food production. The country has had to import much of its food in recent years, including about 100,000 tons of wheat, and 150,000 tons of rice annually. Food imports in 1973, not including live animals which make up a large part of the food bill, cost about 11 billion CFA ($44 million), or 7 percent of imports.

While farm incomes of the cocoa, coffee and other commercial crop producers have improved substantially, the farmers of the north savannah area have had few possibilities for commercial production. The 1971-76 plan estimated the value of commercial agricultural production per head of rural population in the north in 1970 was less than one-third that of farmers in the south. Other estimates indicate farm incomes in the eastern Abengourou region as being six times that of the northern farmers.

The drought had serious adverse effects on agricultural production throughout the country. Losses from the decline in cocoa and coffee production from 1971/72 to 73/74 are estimated at nearly 20 billion CFA ($83,000,000) at the producer level. But it was the northern part of the country that was most seriously affected. Rice acreage in the northwest region was reduced by 50 percent from 1971 to 1972 and 1973. The amount marketed dropped from 2,000 tons to 500 tons. Production of cereal crops such as maize, sorghum and millet was similarly affected, though estimates are not available. The drought in the Sahel had a particularly important impact on the north through its effect on the transhumant Peul livestock herds. Because of the persistent droughts of the last few years there has been an acceleration of the migration of the Peul herders into northern Ivory Coast from Mali and Upper Volta. The GOIC estimates that in the last six years the Peul herds have more than doubled, from 60,000 head in 1968 to 150,000 in 1974. This influx of cattle is apparently not unwelcome. Ivory Coast wants the additional livestock, and the region is ecologically favorable for cattle production, but problems arise out of the competition with existing local sedentary livestock raisers and crop growers as migratory herding methods of the Peul lead to crop damage and rangeland conflicts with the local people.

The Nation's Response

The 1971-76 Development Plan set out the following as the four main objectives:

1. Diversification of production and exports;

2. Increase in productivity of traditional commercial crops,

3. Promotion of food crop production,

4. Development of the north.

The first two of these objectives were already underway and considerable progress had already been made by 1970. Research on the traditional export crops over many years had provided the improved planting materials and knowledge of improved cultural practices for coffee and cocoa and some of the lesser crops.

The last two objectives represented a major change in policy, a recognition of the growing disparities and the growing food deficits. The recent drought, which affected much of the country, reducing significantly the production of export crops, as well as food crops, reinforced the argument for development of the north. Programs were initiated early in the plan for development of cotton and rice culture in the region, with assistance from the European Common Market (FED). An ambitious program has been taken up to provide improved amenities to the rural areas of the north. This program, being undertaken by the Fonds Regionnaux d'Amenagement Rural (FRAR) focuses on providing certain minimum facilities, such as electric power, water supplies, health clinics, schools, etc., to selected town which serve as "country development centers."

In November the GOIC requested USAID assistance for development of the north in a document entitled "Request to the Congress of the United States of America" submitted to the American Ambassador to the Ivory Coast. The document was reviewed by the DAP team and discussed with an inter-ministerial group of the GOIC.

The request focuses on the following activities to be undertaken between now and 1980:

1. Studies for the integrated development of the northern zone.

2. Emergency programs "to provide the population of this disadvantaged region with human, material and financial means designed to start them on the path to development."

3. Development of agricultural production.

4. Development and improvement of Peul livestock.

5. Improvement of village water supplies.

6. General livestock improvement.

1. The studies for the integrated development of the north are expected to determine, in the initial phase, the human, material and financial requirements for integrated development of the north, encompassing the six activities listed above. The GOIC has already engaged Development and Resources Corporation (DRC) to undertake the studies. DRC is also expected to assist the government in perfecting the master plan for the north, help assure financing for the development, compile feasibility dossiers for projects, provide follow-up supervision of the implementation of the programs and provide training of Ivorian staff.

2. The emergency program will include:

(a) Improvement or expansion of the communications infrastructure including asphalting of roads and construction of bridges;

(b) harnessing of surface water;

(c) installation of new sub-prefectures;

(d) development of education;

(e) expansion of health services;

(f) agricultural development including land clearing and a program of general support to agriculture;

(g) livestock development, including establishment of animal health protection centers; marketing program for livestock products, and water points in areas most affected by drought.

3. The program for development of agricultural production for which assistance was requested involves the following:

(a) Organization of a modern sector of intensive maize production; (this will involve initially creation of a seed farm and then a program of development with small farm holdings. The target is to increase maize production by 100,000 tons between 1975 and 1980);

(b) development of soya cultivation;

(c) stockpiling of maize as a means of stabilizing the price of maize;

(d) training of Ivorian staff for maize and soya production programs.

4. The programs for development and improvement of Peul livestock will involve the following activities:

(a) A complete census of Peul livestock in the Ivory Coast, involving aerial photography of the involved zones at 1/20,000;

(b) preliminary study of the management of transhumant livestock;

(c) experimental trial with Peul livestock involving 10,000 head of sedentarized Peul Zebu cattle.

5. The improved village water supplies program is part of a priority program of the GOIC for providing improved water points for 7,000 villages in the country. The government has decided to begin the program in the north with a target of 581 wells and 287 deep bore holes to be completed by July 1976 in the four northern districts.

6. The general program of livestock improvement is intended to encompass investment in infrastructure to properly support livestock rearing in the region, training of staff, cattle breeding programs for genetic improvement and veterinary services. This program which is not scheduled to begin until 1976 has not been planned in detail.

A summary of the proposed programs and their estimated year by year costs are provided in Table 1.

The GOIC document requested financing for only four of the six programs (1, 3, 4 and 5 of Table 1) and only for the year 1974. In discussions held with the inter-ministerial group it was explained that the proposal was submitted on the understanding that emergency drought relief assistance might be available only on the basis of the current year. The emergency program was excluded from this request because that program is already funded for 1974. The general program for livestock development was excluded because planning is incomplete and the program is not to start until after 1975. They indicated that funding was required for all of the programs beyond 1974 and AID assistance on all the programs would be appreciated.

Each of the proposed programs were reviewed with the inter-ministerial group. All appear to be basically sound. The studies for integral development, for which arrangements are being finalized with DRC, are expected to provide a basis for refinements in the programs. It seems an excellent way to approach the problems of the north.

The planned program for development of agricultural production focuses on two crops: corn and soybeans. The Ivory Coast has had experience with corn production. It is a crop well suited to the Guinea-Sudanic zone and improved varieties are available with high yield potential. The ambitious target of increasing corn production by 33 percent by 1980 is not unrealistic. However, maize production in West Africa has experienced problems, particularly marketing and storage problems, which need to be carefully considered.

The Ivory Coast is interested in developing a soybean industry and has already taken initial steps to introduce the crop. On advice from scientists at Purdue, the University of Illinois and Mississippi State University, Ivory Coast conducted a set of trails to assess the adaptability of different varieties and their yield possibilities under a variety of soil and ecological conditions in the north. Results of these trials are not yet available but the GOIC officials are encouraged.

The program for development and management of transhumant herds involves designation of four entry points with corresponding transient zones and livestock trails; marking out of stock raising zones -- reception zones, where transhumant herds can settle permanently; and studies leading to formulation of a pastoral code and establishment of a market system and regulations. The program is intended to improve Ivory Coast's meat supply, make better use of land and water resources of the north and contribute to the well being of the cultivators as well as the transhumant Peul herdsmen.

Agricultural Development Agencies

For implementation of development policies the GOIC relies on autonomous development societies (Societes de Developpement Autonomes) set up and financed by the government for the development of one or more specific crops. Normally they work in close cooperation with a French semi-public research organization. For example, the Société d'Assistance Techniques pour la Modernisation de l'Agriculture de la Cote d'Ivoire" (SATMACI) was founded in 1958 to carry out development programs for cocoa and coffee. It works closely with the French applied research organization (IFCC). The Societe pour le Development de Palmier a Huile (SODEPALM), established in 1963, to carry out development activities with oil palm, works closely with IRHO. The Compagnie Francaise pour le Developpement des Textiles (CFDT) is a French development firm

functioning throughout Franchophone West Africa and working closely with the French research organization IRCT.

Until 1970 there was no development agency with responsibility to promote development of rice cultivation. At that time the Société pour le Developpement du Riz was established with close relations with IRAT. While IRAT has not previously had an active program of research on cereal crops in the Ivory Coast, it has had a long and impressive history of research on important food crops in Western Africa and much of that work is relevant to the production problems of cereal crops in the northern Ivory Coast.

This system of autonomous development societies, with each society concerned with only one or two commodities, has been effective in dealing with important export crops. It is not likely that this arrangement would work well in the north where appropriate farming systems will probably require integration of several crops in a rotation. It would be wasteful, and confusing, to have several agencies trying to work at the farm level for the various crops.

Agricultural Credit

With the failure of the former agricultural credit institution, CNCA, because of excessive number of defaulters, the GOIC established the "Banque Nationale pour le Developpement Agricole" (BNDA) in 1969. The BNDA was structured to avoid the worse problems of the defunct CNCA and is expected to expand its lending operations rapidly. It projects an increase in loans granted from 2.071 million CFA in 1970 to 11.0 million CFA by 1975. However, it does not seem that its present structure and lending policies will make it a very effective channel for credit to the small cereal producing farmers of the north. BNDA makes three types of loans:

(a) loans to large individual companies or semi-autonomous agencies for farm development;

(b) loans to crop cooperatives to finance marketing of members' produce;

(c) loans to individual farmers (or state societies) to finance pre-harvest requirements.

The repayment period for the first two types of loans is from 2 to 10 years at interest rates varying between 5½ to 8%. Loans of the third type are to be repaid at the end of each growing season. The rate varies from 5¾ to 9%.

The following securities are required for all loans to individual farmers:

(a) A mortgage on land and engagement to sell export crops and rice through a recognized marketing channel which deducts payment for all loans over CFA 5 million;

(b) for loans under CFA 5 million, an additional requirement is collective guarantee of a number of farmers of the village; default by one farmer means all the rest are barred from further loans. Defaulters from the defunct CNCA are also barred.

These terms, while they may help insure BNDA's financial viability do not seem well adapted to the credit needs of the typical small subsistence farmer.

Agricultural Training

The Ministry of Agriculture is responsible for education and training in agriculture including, until recently, veterinary and livestock workers. The ministry carries out the training at the professional level directly, whereas the various specialized development societies carry out the farm level training on behalf of the ministry.

The Ministry has greatly expanded its training facilities and student capacity in recent years. The number of schools increased from 3 to 7 between 1960 and 1970 and the student capacity increased from 140 to 520. The level of training ranges from secondary school level to the Ingénieur Agricole level. We understand that the total number who have thus far been trained as agronomists at the Ingénieur Agricole level is only 60 and the current turn out is 10 each year. However, the capacity is soon to be increased with an estimated turnout of 30 to 40 per year, three or four years from now. At that time they may be able to start replacing much of the expatriate personnel that now dominate the planning units, the autonomous agricultural development societies and the research organizations.

Possibilities for AID support to Development Programs

The six programs for which the GOIC has requested AID assistance, as described above, merit consideration for AID financial and/or technical support. The six programs are restated here with suggestions for possible AID support.

1. Studies for Integrated Development of the North. (1974-77). Estimated cost 800 million francs (CFA). This key and useful program may more appropriately be financed by the African Development Bank. AID should support it.

2. Emergency Programs for the North (1974-76). Estimated cost 12 billion francs (CFA). Most of the activities contemplated under this program are consistent with AID objectives and priorities. It appears that, at least from the first year, funding has already been arranged. If assistance is required in following years, some elements could be considered for financing through the Entente Fund.

3. Development of Agricultural Production (1974-77). Estimated cost 1 billion francs (CFA). This is a program for which the United States is uniquely qualified to provide the assistance needed. The GOIC has already availed of the services of appropriate American universities under TAB and 211(d) programs. AID should explore alternative devices for giving this program full support.

4. Development and Management of Transhumant Herds (1974-80). Estimated total cost 5,710 million francs (CFA). Cost estimates seem high. The proposal needs further study before commitment of assistance. Financing from the Entente Fund should be considered if review indicates the approach and design are good.

5. Improvement of Village Water Supplies (1974-76). Estimated cost 1,700 million francs (CFA). This program is directed at one of AID's high priority objectives -- improvement of health facilities in rural areas. The government has had some experience in the last few years in developing village water supplies in the north with assistance from FED. This experience should be reviewed and if it supports expansion of the program AID should consider funding it.

6. General Livestock Improvement (1975-80). Estimated cost 14,432 million francs (CFA). Planning for this program is not yet complete. The programs are in an area of U.S. interest, but AID should await more detailed plans before committing support.

Table 1

Estimated Annual Costs Proposed Programs
(in millions of francs-CFA)

PROGRAM	1974	1975	1976	1977	1978	1979	1980	Total
1. Studies for Integrated Development	80	250	300	170	-	-	-	800
2. Emergency Programs	1,130	7,470	3,400	-	-	-	-	12,000
3. Development of Agr. Production	355	255	219	219	-	-	-	1,018
4. Development & Management of Transhumont Herds	265	795	930	930	930	930	930	5,710
5. Improvement of Village Water Supplies	300	800	600	-	-	-	-	1,700
6. General Program of Livestock Dev.	-	2,429	2,293	2,647	2,728	2,225	2,110	14,432
Total	2,130	11,969	7,742	3,966	3,658	3,155	3,040	35,660

IVORY COAST

EDUCATION AND HUMAN RESOURCES DEVELOPMENT SECTOR ASSESSMENT

The Ivory Coast is unique among the Entente countries -- it is one of the most prosperous nations in West Africa, it is politically stable, it has a growing industrial capability and diversified agriculture. Its economic prosperity is shared in part with, and fanned by, a massive influx of Africans from the Sahel region seeking employment. The number of foreign, largely French, technicians in the country in both private and public positions is also surprising, especially when compared to the number of Europeans in other Entente countries.

Since independence in 1960, the Ivory Coast has made impressive educational gains. Primary school enrollments have more than doubled, so that school attendance is presently about one-half of the school aged population and should hit 100 percent by 1986. At the secondary level, enrollments have increased sixfold while at the new university there are over 4,000 students. University enrollment figures do not include those in the technical and agricultural training centers which have also been opened since independence.

In spite of these achievements, the Ivory Coast's primary level educational problems are at this point very similar to those found elsewhere in the Entente: a high repeater rate (over 30 percent), a lack of teachers (about 1 teacher for 70 pupils), a classical type of curricula unadapted to the geographical, economic or social realities of the country, a dropout rate of almost 10 percent, and a severe imbalance in enrollment ranging from a high on the coast of 95 percent to a low of 5 percent in the north but approaching 50 percent as a national average.

It is anticipated that ITV will assist the Ivory Coast to overcome many of the problems and inequalities presently found in the educational system. With substantial support from FAC and UNESCO, GOIC committed itself in 1968 to the development of ITV with a view to achieving cultural unification of the country (where there are presently 60 indigenous languages spoken -- none of which is dominant) by providing French language education for all, by revamping the curricular program as a part of the Ivorization program and democratizing education by making it available to all, and by extending ITV to adults and youths who would not have had a chance to benefit from the expanding school enrollments.

However, the question of costs has continued to be a nagging one. In 1967 it was estimated that the unit cost of education for primary school students was 1,350 CFA and that with the new ITV system, with all of its

special benefits, the cost per pupil would increase to 5,610 CFA given a pupil population of 500,000. Current education costs are already absorbing 30 percent of the budgetary expenditures and UNESCO has recently estimated that only by extending ITV to all primary education and to adult education would it be possible to make ITV economical.

To date the educational system is still not producing sufficient skilled and specialized personnel to enable Ivorians to satisfy manpower demands. This constraint must be considered at the same time as the country begins to grapple with the problem of how to deal with the mounting pressures for admission to secondary level education which will gradually be exerted by the extension of ITV and the simultaneous application of a policy of automatic promotion from grade 1 to 6. Thus growing numbers of students will have completed primary school by ages 11 to 12 and be attempting to enter secondary school.

Two key governmental organizations have been developed to begin to address problems of lack of education in the rural areas and of rural development: ONPR (Office National de Promotion Rurale), which is to serve as a vehicle for mobilizing the farmers and soliciting their cooperation and active participation in rural development efforts, and FRAR (Fonds Regionaux d'Amenagement Rural) which will be responsible for the planning and coordination of rural development per se.

GOIC policy is to extend the development and wealth of the country from Abidjan to the interior -- that is to ascertain that Abidjan share with the rest of the country the wealth which the nation has produced. The development effort is directed toward the small and medium-sized town. By 1985, according to the plan, there will be a minimum level of facilities available to the whole nation. The "minimum level of facilities" would be a primary school, a market, a government post (centre d'etat civil) and a health center. The desired level of facilities being considered and indexed in villages and town nationwide include: schools (number and classes), health facilities (number of health centers and number of maternity and child-care centers), socio-cultural factors, land management offices, hydrological information (water supply equipment and water sources), electricity, availability of markets (daily or periodical), shops (there is being established a network of self-service stores which have cheaper goods than those available generally in the interior which are privately owned but have government credit available to them), PTT, agricultural agents or agents from some government associated agency, and cooperatives or pre-cooperative organizations.

The country has been "catalogued" and reorganized with 8,700 villages (up to 4,000 inhabitants) having been registered and with medium-sized towns designated as having between 4,000 and 10,000 inhabitants. A new component called the pays rural(rural country) has been established which generally will have up to 10,000 people or up to about 10 villages. This group of villages will have common cultural and economic links which will make them a cohesive developmental unit, and one village will be designated as the center. Facilities which each village does not need to have individually will be available to all of the villages in the pays rural from the central village which will also serve as a social and cultural center. There are 758 pays ruraux in the country and some five or six of them usually constitute a sous-prefecture. While some of the pays ruraux match the old canton divisions, many do not and the same is true of the sous-prefecture level. Above the sous-prefecture comes the department and the region whose boundaries are generally preserved.

The responsible service and production ministries (education, health, agriculture, etc.) are asked to provide FRDR with a timetable for the establishment of the minimum facilities for the villages and for the pays ruraux centers. Each village joining the scheme is responsible for the care and maintenance of whatever equipment or facilities it receives. It is not required that a village establish a cooperative in order to receive equipment or participate in the scheme, but they must establish some means for controlling and sharing such things. On a national basis 50 percent of the costs of the scheme are to be paid directly by the people and 50 percent by the government (including foreign assistance). In fact, however, regions of the country will pay at different rates relative to their economic ability to do so. Thus people in the Savannah Region pay 15 percent of the cost to the government's 85 percent; the Western Region pays 30 percent to the government's 70 percent, the Central West Region pays 65 percent to the government's 35 percent, and the Southeast pays 85 percent to the government's 15 percent. Three hundred village units are presently being established and the government has authorized an initial tranche of 40 billion CFA (about $130,000,000) for the project.

A system is being developed to provide credit to villages which do not have money for the non-productive equipment(e.g., dispensaries, schools, markets, etc.). Loans for productive equipment can be secured from the Bank of National Development and the government anticipates that this will work as a revolving fund so that loan repayments will help to finance the continuous expansion of the scheme. The average terms for these loans will be five years. The maximum amount each individual can be asked to contribute to the scheme is 500 CFA in the richer regions and 200 in the poorer. A Committee de Collegues is established in each village to be responsible for handling the funds which are to be contributed by the village. This group ascertains that individuals have

participated, have received credit for their contributions, etc. The Committee is also the body responsible for the loans. To date, it is claimed, villages have been happy and willing to participate in the scheme and the government has attempted to make loan funds available to the poorer regions in the north so they will not be delayed in participating in the scheme. It has been found in the south that loan funds were often not requested.

The plan (l'Esquisse de Structuration du Milieu Rural) was approved by the Ministry of Plan in 1973. The intention has been that the peasants could influence the plans for rural development -- that they would be full partners in the effort. To accomplish this the ONPR was created and it has sought to secure peasant inputs through animateurs sent into the field to organize and work with them. In addition the ONPR is responsible for coordinating the inputs of the various services and action ministries in the rural areas. Thus an ONPR conseiller d'animation would serve eight to nine villages and would coordinate the other specialized animateurs serving these villages such as agricultural extension agents, sanitary agents, etc. The extent to which ONPR is actually succeeding in securing active peasant input and participation in these programs is not known. The organization has, however, only been functioning since late July 1973. In order to reach the rural masses, ONPR has announced that it will make maximum use of radio and television; and in order to get participation and avoid one-way communication, radio-clubs and television-clubs will become major instruments for this as well as for feed-back and evaluation purposes. How ONPR will develop materials for the media is not yet known, but ITV itself has not yet done very significant work in the adult education area. ONPR has not expressed any intention of publishing a rural newspaper but it does plan to publish a magazine for rural youth.

Recommendation

Regardless of whether or not AID participates in this rural development effort, it is strongly recommended that the agency make every effort to study and follow the development of this model. It is undoubtedly the most sophisticated and detailed model functioning in the Entente region, and perhaps in all of Africa. It is already three years behind schedule, but it presently appears able to move ahead steadily with the detailed program already elaborated. If this model works in the Ivory Coast, and if the revolving fund mechanism functions properly, then a heavy initial investment may in fact be justified and may eventually be recaptured. AID should pay special attention to how the scheme functions

in the northern part of the Ivory Coast, where conditions come closer to those prevailing in the poorer Entente countries. In these regions, AID's participation should be more meaningful and extensive.

How the Ivory Coast model may work with regard to the Oncho control program would also be of considerable interest for those other West African states which will be involved in Oncho resettlement efforts.

AID Participation in the Ivory Coast ETV (or ITV) Evaluation

AID is engaged in the final negotiations of a project which will provide funding for an External Evaluation Unit for the Ivory Coast's ETV Program for the next two and perhaps five (1975-79) years. The main purposes of the evaluation are: to provide decision makers and staff with accurate information, and to facilitate more effective achievement of program goals on the basis of an analysis of the main problem areas. Pedogogical, economic, technical and management areas are to be evaluated in both primary and out-of-school education sectors.

Some of the main changes which might be expected in the Ivory Coast Program as a result of the evaluation project might be:

1. From the pedogogical evaluation: improved results on criterion tests in main primary system subject areas (French and Math), reduced dropout and repeater rates, improved teaching skills, more positive attitudes towards the ETV Program on the part of parents and teachers, increased relevance of curriculum to development goals;

2. From the economic evaluation: reduced unit costs as a result of, for example, reduced reception and production costs and more efficient management, more accurate forward investment planning;

3. From the technical evaluation: a reduction in frequency of transmitter breakdowns, a reduction in production time and hence increase in time available for training of national staff at Complexe (ETV Complex in Bouake), an increase in the quality and effectiveness of ETV programs;

4. From the management evaluation: increase in job satisfaction of expatriate and national staff working in Complexe (low at the moment by any measure), improved information flow within ETV Program, more rational organization of functions and responsibilities;

5. From the out-of-school sector in particular: increase in attendance at broadcasts, appropriate changes in behavior among target population (e.g., development of cooperatives, improved infant nutrition), tie-in of broadcasts with technical back-up in villages (health care, rural development projects, etc.).

Important changes elsewhere (especially Niger) may result if the approach and the findings derived from the Ivory Coast (the evaluation model, data collection instruments, cost analysis and project procedures, etc.) are made available to ETV programs in other countries.

The different projects to be AID-funded during the proposed project period are:

A. Projects in the Primary Education Sector

1. The construction and use of a cost evaluation model for the primary education system. This component will follow on a computer-based cost evaluation model similar to one already developed for Indonesia.

2. Specialized assistance in studies concerned with cost reduction options in various sectors of the ETV program.

3. A feasibility study for a comparative inquiry into behavioral differences between children in ETV and non-ETV classes. This study will attempt to evaluate systematically the claims made that children in ETV classes appear more self-confident, more lively, and more articulate than children in non-ETV classes.

4. A feasibility study for a comparative inquiry into the aspirations of children in ETV and in non-ETV classes.

One of the main objectives of the ETV primary school system is to encourage the integration of young school-leavers into the rural economy and to reduce the exodus from the countryside into the towns. This study will investigate the possibility of developing instruments (e.g., projection tests) to identify the differences in aspirations, if any, between ETV and non-ETV children for adult roles and occupations. There will be an effort to determine if, with other things equal, ETV children from a rural background are more or less motivated than non-ETV children from the same background for an adult role in a rural milieu. Such findings could have profound significance in the conduct of the overall long-term goals of the ETV programs.

B. Projects in the out-of-school education sector

1. Cost analysis - to project costs of secondary and post-primary school instruction, of the role of education in agricultural and industrial development in terms of training and manpower needs, and of out-of-school education given varying rates of future development.

2. Needs assessment - to take an inventory and make an analysis of needs felt by urban and rural populations in the area of out-of-school education.

3. Administrative history - to identify how decisions are made and what problems arise as an out-of-school education project develops.

4. Immediate impact - to evaluate how the out-of-school TV programs are received in the listening center, with special attention to technical conditions of reception, description of audience, translation problems, discussions on the theme and comprehension of the message.

5. Long-term impact - to compile the long-term results of the out-of-school education programs in their effort to increase production and income, to improve living conditions and health, and to stem the rural exodus of Ivorian citizens, as well as to study conditions under which behavior changes are obtained.

Recommendation

That careful consideration be given to adapting this model and applying it to the Niger ITV program. Nigerian officials are desperately in need of the same kinds of information upon which to base their decisions regarding the future role of ITV there. All Research and Development programs which AID sponsors or in which AID participates should have built into them, as this proposed project does, a provision which makes the application of models, instruments or data possible to locations outside of the host country.

IVORY COAST

HEALTH SECTOR ASSESSMENT

Major Health Problems

To the casual visitor, the Ivory Coast, with its Miami-like capital city, imparts an impression of wealth, strength and economic success. But if one visits the peri-urban slums or the countryside, it becomes apparent that the economic benefits implied by Abidjan's skyline have not trickled down to the masses any more than Great Britain's early 19th century industrial wealth trickled down to the tuberculosis-ridden slum dwellers of Glasgow and Birmingham.

The Ivorian population is young: 52.5 percent of the inhabitants are under 19 years of age. The overall population growth rate is 2.4 percent per year and exceeds the estimates of the 1971-1975 Five Year Plan. It is now estimated that the population level projected for 1980 in 1969 will practically be reached in 1975, as shown in the following table.

Population Projects - 1969 and 1974

Projected Population	1969 Estimate	1974 Estimate
1975		
Rural	3,426,200	4,299,000
Urban	2,050,100	2,213,900
Total	5,476,300	6,512,900
1980		
Total	6,449,800	7,962,100

Source: Ministry of Public Health and Population, Planification Sanitaire - Document Preliminaire, April 1974.

The rate of urbanization is expected to reach 35 percent in 1975, one of the highest rates in Africa. The city of Abidjan is expected to have 1 million inhabitants by 1975, 1.5 million by 1980 and 2.0 million by 1985. This high rate of urbanization is creating tremendous housing, sanitation, nutrition and employment problems which are a burden to the health sector.

Although the Government allocates about 10 percent of the national budget for health programs, there is no significant coverage of the rural masses, who are found not only in the rural areas proper but also in the peri-urban slums where many have migrated in hope of finding work.

Major Disease Problems

Malaria Malaria is present practically everywhere; 99,000 cases were hospitalized in 1972 and it is not unreasonable to assume that 10 times more people suffer from the disease.

Trypanosomiasis This disease seems to be under control but constant extensive and costly surveillance is required to keep it so (identifying new cases, giving chemical therapy, destroying the glossinae vectors). Plans for developing agriculture and livestock by expanding water resources run the risk of increasing glossinae breeding places alongside rivers and irrigation ditches unless proper precautions are taken.

Leprosy The rate of prevalence of leprosy is around 0.15 percent. The disease is controlled by identifying all cases and giving them adequate treatment to lessen or abolish contagion.

Venereal Diseases VD is extensive throughout the country.

Spirochetosis The rate of prevalence of yaws (a non-venereal trepanomatosis) is 4.087 percent.

Onchocerciasis This disease, which leads to blindness, is a major problem. Over 2 million cases were identified during the ten-year period 1960-69. It exists wherever fast-flowing water and the appropriate type of riverine vegetation offers breeding palce for S. dammosum, the fly vector. Major areas of endemicity are the Bandama, Bagone, Leraba, Comoe and N'Zi basins and it is feared that the Cavally and Sassandra river basins now being developed may also be affected.

Trachoma Some 26,771 cases of trachoma were identified during the 1960-69 decade.

Guinea worm New cases of guinea worm occur at the rate of 50,000 a year. This is a crippling disease caused by the lodgement of a yard-long female worm (drocuncula medineusis) in the subcutaneous tissues of the leg.

Schistosomiasis This disease is quite prevalent, with 700,000 cases identified.

Measles Since 1960 some 283,600 cases of measles have been identified with mortality rates ranging from 6 to 30 percent. Between 1963 and 1969 about 1.5 million vaccinations were made but the campaign has not been maintained, resulting in the existence of a sizeable susceptible population of infants and young children.

Tuberculosis In spite of a BCG program leading to the vaccination of 1.7 million people since 1964, tuberculosis is rampant everywhere. Its transmission is encouraged by the crowding in slums and huts and by the inadequacy of the PMI and rural health structure where vaccinations could normally take place.

Malnutrition Malnutrition exists everywhere, especially in the periurban "bidonvilles" such as Treichville. It is believed that about 6 percent of Ivorian children have a serious degree of malnutrition requiring immediate attention.

Diarrheas Severe diarrheal diseases persist among infants and children, resulting in high mortality rates which work against receptiveness to child spacing education.

Since there is no reliable statistical information available, the above data do not reflect the reciprocal importance of each endemic entity. On the whole, available figures show that:

- transmissible (preventable) diseases represent 58.8 percent of hospital admissions.

- infant mortality represents 52 percent of reported deaths.

- 30 percent of all deaths between 1 and 5 years of age are caused by measles.

Environmental Problems

- Inadequate water supply in the north, made worse by the recent drought.

- Inadequate balance between food crops and cash crops, resulting in excessive dietary reliance on starches.

Health Delivery Problems

- Inadequacy of total absence of infrastructure needed to deliver health services, especially those of a preventive nature.

- Shortage and maldistribution of health personnel, especially at the middle and lower levels.

- Inadequate education of both health personnel and the population at large.

- Inadequacy of the funds needed to do the job as well as of the administrative competence to plan and operate efficiently.

Infrastructure for the Delivery of Health Services

The infrastructure for delivering health services is similar to that found in most francophone countries of West Africa. On paper it consists of a pyramid-like structure with regional hospital centers at the top. Feeding into the regional centers are departmental level "circonscriptions medicales." Ideally, each has a small hospital, a PMI and a maternity. Spreading out from the circonscriptions medicales are primary health posts, each of which includes (theoretically) an infirmary where basic surgery can be performed, a PMI and a maternity. At the bottom of the pyramid are basic rural health posts where vaccinations, simple first-aid, pre and post-natal advice, sanitary education and nutrition are given. Working out of these health posts, in principle, are mobile teams which carry basic health care to the villages.

If this infrastructure existed in fact as well as on paper, the health needs of the Ivorian population could probably be met satisfactorily. However, as in other countries of the region, the system is very incomplete. Emphasis has been on starting at the top of the pyramid instead of building it from the ground up. Consequently, the rural areas have hardly been penetrated. For instance, there are only 16 PMIs in the entire country and of these 6 serve urban populations. The following table illustrates the urban bias of the system and shows the infrastructure to be especially weak in the North and West regions where the environment is least favorable and hence the need for health services is great. The system also leans heavily toward curative rather than preventive medicine.

The concentration of hospital beds in Abidjan is 1 per 479 inhabitants while in the north it is only 1 per 2,000. It is reported that all health units outside Abidjan are dilapidated and that vehicles are old and often out of commission for lack of fuel, maintenance and spare parts.

One reason for the disproportionate availability of health care facilities in the more urbanized regions is the unwillingness of health personnel to work in the rural areas. This, of course, is a problem common to all the African countries. The following table shows the uneven distribution of health workers.

Preventive medicine infrastructure as it existed in 1969 is summarized in the following tables.

Medical Facilities by Circonscription - 1969

Circonscription	Major Hospitals	1st Category Hospitals	2nd Category Hospitals	Health Center & Maternity	Health Center Only	Maternity Beds (1)	Hospital Beds (2)	Total (1) & (2)	Other Beds	Radiology	Surgery
Abidjan	3	-	1	4	8	418	1,461	1,879		18	12
Bingerville (psychiatry)	1	-	-	-	-	-	288	288	-	1	-
South	-	7	7	24	43	636	617	1,253	89	9	5
Central	1	3	11	11	32	603	1,157	1,760	67	12	12
Bouaké											
North	1	1	5	7	29	237	399	636	-	6	4
East	1	1	2	7	13	174	267	441	15	2	2
West	1	1	3	4	10	134	279	413	6	3	2
Central West	1	1	4	1	11	187	427	617	33	3	3
Total	9	14	33	58	146	2,389	4,895	7,284	210	54	40

Note: Abidjan.....510,000 inhabitants
South.....872,000
Central.....1,222,000
North.....768,000
East.....311,000
West.....530,000
Central-W.....413,000

Source: 1971-1975 Five Year Plan

Hospital Beds by Region - 1969

Region	Population per Bed		Number of Beds		
	Maternity	Hospital	Maternity	Hospital	Total
North	3,240	1,925	237	399	636
South (without Abidjan)	1,372	1,415	636	617	1,253
East	1,788	1,165	174	267	441
West	3,960	1,902	134	279	413
Central	2,027	1,057	603	1,157	1,760
Central-West	2,210	968	187	427	614
Abidjan	1,359	479	360	1,021	1,381
National Total w/Abidjan	1,977	1,106	2,331	4,167	6,498

Hospital Personnel by Region - 1969

Circonscription	Physicians	Pharmacists	Dentists	Midwives	Nurses	Nurses Aides	Admin.	Misc.	Total
Abidjan	89	7	3	65	400	77	107	648	1,396
Bingerville (Psych.)	2	-	-	-	20	5	16	125	168
South	15	-	-	17	175	68	28	154	457
Central	29	2	2	24	271	68	48	331	775
North	10	-	1	6	85	35	15	105	257
East	5	-	1	9	64	14	11	64	168
West	6	1	1	4	53	12	14	62	153
Central West	12	1	1	12	85	28	21	122	282
Total	168	11	9	137	1,153	307	260	1,611	3,656

Source: Five Year Plan 1971-1975.

Social Medicine Infrastructure - 1969

Service	Central Base	Satellite Center	Beds (L)	Beds (T)	Surgery	Lab.	X-ray (fixed)	X-ray (mobile)
Grandes Endémies	14	93	1,139	190	3	27	2	
PMI	6	2				2	2	
Anti-TB Centers	5	14				6	4	4
School, University Health Services	12	8	30			1		
Sanitary Education	3	-				-		
Hygiene	4	1				1		

L - Leprosy
T - Trypanosomiasis

Source: Five Year Plan 1971-1975.

There are two institutes of preventive medicine in Abidjan: an Institute of Hygiene which at present is limited to dealing with current public health and sanitation practices in the city of Abidjan; and the National Institute of Public Health whose activities are national in scope.

The Institute of Public Health is headed by Dr. N'Da Konan, whose responsibilities seem to be strictly administrative. His deputy is a French physician who appears to run the Institute from a technical point of view. The Institute includes three major sections: Maternal and Child Health, Environmental Health, and Communicable Diseases. Other sections include Venereal Disease Control, TB Control, Mental Health, and Nutrition. To plan, design and program there is a Common Social Service, a Common Education Service, a Common Epidemiology and Health Statistics Service, and a Common Library and Documentation Service.

The Institute will extend its operations to the regions through "application zones" which will cover one or sometimes two "sous-prefectures" where educational and demonstrative public health activities will be carried out. At present such zones are limited to Abidjan and Bouake. The Institute cannot expand further without more funds. The Institute also organizes a year of study, including practical field experience, in "social medicine" for 5th year medical students. The Institute's education program also covers Sanitary Engineering, Laboratory Technology, Dietetics and Sanitation. Nutrition will be added as soon as a qualified professor can be recruited.

Personnel Availability

The most recent statistics on the availability of health personnel date back to 1969 and are quoted in the 1971-1975 health plan. In 1969 there were:

252	physicians, of which 120 were Ivorian
31	pharmacists, of which 19 were Ivorian
217	midwives, of which 168 were Ivorian
355	nurses (both sexes) with state degrees
2,301	practical nurses (both sexes)
145	orderlies and nurses aides

Abidjan, with one-eighth of the total population, absorbs 50 percent of the physicians, 60 percent of the midwives, 33 percent of the nurses and nurses aides. Hence there are inadequate numbers of health personnel in

the departments, especially in the rural areas, inadequate numbers of administrative and laboratory personnel, both in Abidjan and elsewhere, and absence of any cadres for preventive medicine and sanitary engineering.

Training facilities do exist, however. A School of Medicine at Abidjan has an improved curriculum which includes some training in preventive (social) medicine. This consists of a one-year course in preventive medicine and social diseases, culminating in a one-month field experience at Bouake where students are exposed to the problems of the rural areas.

A School of Nursing is in operation at Abidjan which graduates about 100 nurses a year but, as already mentioned, few want to work in the rural areas, partly due to the absence of an adequate infrastructure. The GOIC feels an obligation to employ these nurses nevertheless, and to do so overstaffs the urban and suburban health posts and reduces the number of working hours. This phenomenon is not limited to health, nor is it limited to the Ivory Coast. The graduation of more school leavers than there are openings is another aspect of the African labor force imbalance. The basic health needs of the rural areas could be met by lower level health personnel recruited from the countryside and given elementary training near the locales where they will work.

The training role of the National Institute of Public Health has been discussed under the previous heading.

Government Plans to Deal with Constraints

The 1971-1975 Plan provides for six specific goals in health:

- fight against transmissible diseases

- protect mothers and children

- provide health education for the whole population

- promote mental health, especially social psychiatry

- complete hospital coverage for the entire territory with a goal of 1 hospital bed per every 1,000 inhabitants

- improve the dietary regimen of the whole population.

To implement this program, the following activities have been defined:

a. Establishment of "sectors" where the fight against transmissible diseases will be organized.

b. Creation of more PMIs and maternities.

c. Creation of bases for social medicine.

It was decided that the effort will be given priority in the four districts of this region, namely Korhogo, Ferkessedougou, Boundiali, and Odienne where 868 water points are to be set up before July 1976. The works proper comprise 581 wells and 287 deep drill-holes.

The estimate of expenses to be borne is as follows in millions of francs CFA:

581 wells @ 1.1. million each	639.1
287 drill holes at 3.5 million each	1,004.5
Total	1,643.6 million

The estimate of expenditures by year is as follows in millions of francs CFA:

1974		1975		1976	
105 wells	115.5	280 wells	308.0	196 wells	215.6
52 drill holes	182.0	140 drill holes	490.0	95 drill holes	322.5
Total	297.5	Total	798.0	total	538.1

The National Institute of Public Health has plans to initiate a Master's in Public Health Program but currently lacks the funds to support the project.

Evaluation of the Five Year Plan

There has been a delay in implementing the health plan, as shown in the following table which recapitulates the proposed 1971-75 budget by economic region and shows actual expenditures in 1971.

Proposed Health Development Expenditures
(in millions of CFA francs)

Region	1971 Proposed	1971 Actual	1972	1973	1974	1975	Total 1971-75
North	70	30	51	0	410	430	921
East	45	18	2	30	80	60	190
South	165	138	46	30	100	150	464
West	125	51	5	0	160	140	356
Central-West	145	151	22	20	90	40	323
Central	165	198	154	140	176	213	881
South-West	35	33	200	10	40	60	343
Abidjan	430	464	33	289	290	220	1,296
Unassigned	80	71	20	40	50	50	231

Source: Ministry of Plan

The reasons given for the discrepancy between proposed and actual expenditures in 1971 are as follows:

- Inadequacy of preliminary project studies,
- Lack of adequate staffing for existing health units,
- resulting in underutilization of equipment,
- Inadequate distribution of services in urban and rural areas.

Planners list inadequacy of personnel as the most important basic problem.

The Plan concedes that there is a discrepancy between the number of personnel to be trained during the 1971-75 period and the tasks to be accomplished. At the physicians level it has been necessary to rely on external technical assistance because even with a modified curriculum it takes at least 6 years to create the needed doctors. At the paramedical level, the National School of Nursing and Midwifery was anticipated to train 304 graduates every year after 1973, which it cannot do under the present setup. Neither is it possible at this time to train such personnel outside the capital city of Abidjan since the establishment of regional teaching centers is contingent upon the creation of regional hospitals, which is still in the future. Moreover, it will take at least 2-3 years to train key personnel unless major changes are made in the training program. Most administrative personnel and lab technicians will have to be trained outside the country.

It appears that the financial resources appropriated for the Plan are not adequate to allow the fulfillment of the objectives without a strong input of external assistance, both technical and financial. Moreover, it appears that the GOIC, while paying eloquent lip service to the need for extending delivery of health services to the rural areas, has not yet understood that such a service must be built from the ground up and not the other way around. This assertion is supported by the commentaries of the Plan itself, (see page 417), stating that the funds appropriated between 1965 and 1969 for the health budget have been absorbed in toto by activities centered in Abidjan and that no money was left for the periphery. A perusal of the 1971-75 health budget seems to reveal that the funding for this investment is not secure.

The estimates of resources that could be found to finance the Plan seem to have been far too optimistic. This is bound to result in a final lack of coherence and unity in the accomplishments, as by force some will have been funded while others will go begging. The consequences of this situation can further mortgage the harmonious development of health services. The planned investments have been made only at the rate of 35 percent between

1970 and 1974 and no improvement is expected for 1975. The table hereunder illustrates this situation.

Shortfalls in Health Plan 1971-1975
(in millions of CFA francs)

Budget	1971	1972	1973	1974	1975	Total
Proposed	1,681.5	1,870.0	1,828.5	1,810.0	1,810.0	9,000.0
Funded	924.5	471.7	487.3	662.0	850.0	3,395.5
Percent	54.9	25.2	26.6	36.5	46.9	37.7

Source: Five Year Plan 1971-1975.

The original plan mentions 9.7 billion francs but the last 700 million had not been appropriated by November 1974. Moreover, the general GOIC budget did not follow the anticipated growth pattern, thus contributing to the dislocation of the health plan. The table hereunder illustrates this development.

Shortfall in General Budget 1971-1974
(in millions of CFA francs)

	1971	1972	1973	1974
Total Budget				
Proposed	7,590.0	8,320.0	9,090.0	10,030.0
Realized	6,630.8	6,762.2	8,013.5	8,801.9
Percent	87.3	81.2	88.0	87.7
Personnel Expenditures				
Proposed	4,100.0	4,520.0	4,955.0	5,500.0
Realized	3,966.2	4.031.9	4,938.6	5,526.9
Percent	96.7	89.2	99.6	100.5
Operational Expends.				
Proposed	3,490.0	3,800.0	4,135.0	4,530.0
Realized	2,664.6	2,730.3	3,074.9	3,275.0
Percent	76.3	71.8	74.3	72.3

Source: Ministry of Plan.

Note: It is interesting to observe that according to these figures the cuts have hit the operational budget but not the salary expenditures.

Health activities in the Ivory Coast have always been financed from state revenues. This generous policy is now threatened by the population explosion combined with increased costs and increased demand. The problem is an acute one. (That the public could begin to make some contribution to its own health seems obvious when considering the reported growth of the pharmaceutical trade.) The state can no longer afford the cost of curative medicine for the vast majority that cannot pay for its own care. Neither can it continue to ignore the explicit or implicit demands of the rural population. A new imaginative answer to the problem is needed.

External Assistance to Deal with Constraints

There is a wide spectrum of foreign donors ready to assist the Government of the Ivory Coast with its plans and prospects. As usual, however, donors specialize in certain traditional activities and accompany their generosity with operational constraints that may not help reach the desired target. As elsewhere in francophone Africa, the French Government is in the lead and is currently supplying 85 physicians in various research, teaching and applied medicine posts, including major staff positions at the Institute of Public Health.

The United States has supported a small project ($33,000) at the Institute of Public Health to collect and analyze government statistics on education, health, urban housing, and family subsidies.

UNICEF has appropriated $492,000 to be spent in the norther region (Odienne, Boundiale, Korhogo, Ferkessedougou), to supply potable water, health delivery, sanitary education and improved nutrition and to lighten the daily chores of women. This program was inspired by the Lome Conference.* UNESCO, FAO and WHO are articulated into this complex operation.

The World Food Program distributes food through all hospitals and PMIs (88 institutions in all), thus reaching 70,000 people. The WFP also sponsor food-for-work projects.

Possible Areas for U.S. Assistance

Here as elsewhere the United States could promote the implementation of a general plan for the delivery of health services, expanding the areas of geographical impact parallel with the growth of the budget. The basic

* In May 1972 a conference of ministers was held in Lome under the auspices of UNICEF. Representatives of Cameroon, Chad, Gabon, the Ivory Coast, Mali, Mauritania, Niger and Togo attended. The accent was on strong recommendations to concentrate development policies on assistance to children, youth and women.

concepts for the development of health systems in LDCs are restated here:

- Priority to preventive medicine which reduces the need and cost of curative medicine and thus more than pays for itself.

- Health education of the population.

These basic principles can be implemented by:

- Creating village-level health men through in-village education by "roving faculties."

- Expanding the number of polyvalent mobile health units which can visit villages at least once a month, but preferably eventually twice, to animate the local health man, give vaccinations, detect incipient epidemics, correct gross malnutrition and give general sanitary education.

- Expanding the number of health centers to serve as bases for the mobile units.

The United States could make a major contribution to improving the health status of the Ivorian population by cooperating with other donors to implement the above-described health delivery system. Assistance opportunities range from technical assistance, to training, to provision of supplies and equipment, to temporary limited budget support. The UNICEF regional director is in full agreement with this approach and stands ready to recommend that his organization cooperate.

Another important opportunity for U.S. assistance is aid to the National Institute of Public Health. This could take two forms:

a. Recruit and subsidize* a French-speaking U.S. nutritionist to fill the vacant teaching post at the Institute for 1-3 years. This person could also initiate a nutrition surveillance program for the Ivory Coast.

b. Support the creation of a MPH program at the Institute. This would expand the preventive medicine personnel cadre.

---

* The GOIC is willing to provide an Ivorian salary for this post, but this sum would have to be supplemented in order to attract a U.S. Ph.D. or M.D. with experience.

c. Activities leading to two annual checkups of all school children.

d. Extending the Treichville Hospital and building; extending and remodeling provincial hospitals.

e. Building the necessary structures for the training of 500 physicians, 800 nurses, 400 midwives and 50 sanitary agents during the Five-Year Plan period (1971-75).

f. Establishment of a National Blood Bank and a National Medical Supply Depot.

The distribution in the budget between personnel and equipment is enlightening. The table hereunder shows that costlier personnel are given less and less equipment to work with. This tendency is sure to increase unless substantial investment funds for infrastructure development are found.

Allocation of Health Budget
(%)

Year	Personnel	Equipment
1961	46.9	53.1
1965	50.4	49.6
1970	59.6	40.4
1971	59.8	40.2
1972	59.6	40.4
1973	61.6	38.4
1974	62.8	37.2

Source: Five Year Plan 1971-1975.

Potable water is a priority in the view of the Ivorian Government. The GOIC has formulated a program for creating 7,000 village watering points between 1974 and 1980 and has requested U.S. assistance for the project. The proposal summarizes the project as follows:

Few villages are equipped with proper water facilities and therefore lack potable water. As a consequence the populations are afflicted with water-borne diseases. Furthermore, the effects of the drought have had a conspicuous impact in this connection, with the entire territory being affected. It was, however, decided to begin the program in the Northern region where the drought has been particularly severe. This zone, which is one of transition along with the Sahel, has been hit by an almost total shortage of water never experienced in the past, which is aggravated by the influx of migrants fleeing the still harder hit regions of the Sahel.

Nutrition Profile

THE IVORY COAST

Population

Total: 4.6 Million
Growth rate: 2.4%
Rural population: 84%
Major tribes:

Baoules (approx. 700,000) - mostly farmers, concentrated in central Ivory Coast around Bouake. Part of the Agnis-Ashantis group.

Kaoua-Kaouas - settled in the southwest
Krounen

Mande clan - found in the northeast, northwest andaround Abidjan and Bouake; mainly Moslems

Voltaic clan - located in the northeast

Senoufo clan - in the north

Dans
Guros - located in central Ivory Coast

Agriculture

Major crops:

Rice
Corn
Millet
Sweet potatoes
Manioc
Bananas
Coffee
Cocoa
Pineapples

Rice is the most important cereal cultivated, produced mainly in the Gagnoa, Man, Korhogo and Seguela areas. The rice consumption zone extends from the Bandama River to the western border. Corn is grown primarily around Bouake, Korhogo and Odienne. Yams are the primary food crop of the country and the staple food of the majority of the inhabitants. Production centers are Bouake, Korhogo, Seguela, Katiola, Boundoukon and Odienne. Manioc is one of the basic foodstuffs of southeastern Ivory Coast. Plantains are the staple of the forest people.

Livestock:

Cattle
Sheep
Goats
Pigs
Poultry

Animal husbandry is not very well developed in the Ivory Coast, due partly to the dense forests which inhibit livestock raising and partly to the presence of the tsetse fly in certain areas. In order to meet local meat consumption demands, live animals for slaughter are imported from neighboring countries and some meat is flown in regularly from Mali and Upper Volta. Cattle are raised in the districts of Korhogo, Odienne and Bondoukou. As is so often true in Africa, cattle are considered an item of wealth by their owners rather than a source of food. Cattle still constitute the bride price in many parts of the Ivory Coast and are slaughtered only on special occasions. Sheep and goats are raised for meat and milk throughout the country but more than 1/3 are found in central Ivory Coast. They are raised in small herds around villages and receive little care. Pigs are raised in small numbers, primarily in the north where most of the population is Moslem and hence do not eat pork. Pork consumption is limited almost entirely to the Abidjan area

Domestic milk production is low, necessitating imports from France and the Netherlands to meet local demand.

Poultry raising is popular in central Ivory Coast, thanks to a poultry station at Bouake. The largest poultry producer is a cooperative enterprise (Cooperative de Production Avicole - COPRAVI) which accounts for 90% of the chickens placed on the market. Poultry meat is popular throughout the country, but especially in northern Ivory Coast where it is the main source of animal protein. Egg production is important but difficult to evaluate.

Agricultural policies:

Traditionally, the Ivory Coast has relied upon coffee and cocoa exports to provide foreign exchange, but the Government has adopted a policy of diversification and is promoting cultivation of bananas, pineapples and other fruits as well as copra, rubber, cotton and kola nuts for export.

The Government is also aiming at greater self-sufficiency in foodstuffs, but regional differences in food output and an inadequate internal marketing system are putting a brake on this effort. Oil palm trees grow wild in the Ivory Coast in a vast zone of heavy rainfall which parallels the coast and extends 300 km inland. The Government plans to increase production to meet domestic demand and provide surpluses for export as well.

General:

Two kinds of agriculture are practiced in the Ivory Coast: the shifting type, mostly in the savanna region of the north; and the holding type, especially in the cash crop areas of the center. The size of individual holdings averages 5 ha but some plantations are as large as 50 ha.

About 84% of the Ivory Coast population is estimated to be engaged in agriculture, either as paid laborers or as owner/operators of family farms. Migrant labor usually comes from Mali and Upper Volta at harvest time.

Storage:

Villagers have their own storage techniques which, unfortunately, do not provide adequate protection against insects and rodents. Corn is stored by stringing the ears on a rope which is then tied between two poles or trees. Paddy is generally packed in bags which are then hung on horizontal poles fixed to vertical poles and sometimes covered with a loose thatched roof. Cylindrical granaries are constructed from clay reinforced by lattan leaves. They are usually raised above the ground and covered with thatched roofs. This type of container is used to store all kinds of cereals. Groundnuts are stored in baskets kept in the cooking room of the hut.

Fishing

Fish represents the most readily available and the cheapest animal protein food in the Ivory Coast. Fishing in the Gulf of Guinea provides a livelihood for local fishermen using pirogues. Commercial fishing is actively promoted by the Government through the Societe Generale d'Industrialisation de la Peche. River fishing by traditional means takes place in the interior.

Seasonal Food Availability

Seasonal variations in the food supply in the Bouake area illustrate the principle common to almost all African dietary regions where sedentary agriculture is practiced: abundance and diversity of foodstuffs during the weeks following the harvest and gradually decreasing supplies until the new harvest is ready.

In Bouake, yams, the basic food, are present on the menu all year, but larger quantities are available after the harvests of both the early and late crop and then the supply gradually decreases. Manioc and corn reach their maximum availability at other times of the year and are eaten in substantial amounts as consumption of yams decreases. Availability of fish from Mali also varies from month to month and reaches a maximum when cash crops are sold because, at this time there is money for its purchase. This also corresponds to the seasonal

abundance of fish in local waters.

Diets

Despite a relatively high standard of living, foods like yams, plantains, manioc, rice and corn are the staple foods of the vast majority of Ivorians, with the result that diets are high in starches and low in proteins. In recent years, consumption of wheat flour has reached a high level although no wheat is grown in the country. This is a symptom of active Westernization which may not necessarily result in better diets. Noodles made from wheat are becoming popular with urban Africans, as is locally-baked bread and imported 5-gram "bush biscuits" which are a traditional food of the rural mass market as well as the urban market.

Because the estimated meat consumption of 5 kilos per capita per year is very low (even lower than the average of 5.5 kilos per capita for West Africa as a whole), the Government is trying to encourage livestock ranching in the northern half of the country. This area is fairly well suited to animal husbandry but it will be some time before the Ivory Coast livestock program begins to have a substantial output.

Fish is already an important item in the Ivorian diet and the Government is trying to increase production. The coastal people eat fresh saltwater fish and those in the north eat salted fish from the Niger River in Mali and canned sardines from Morocco. Local sources could probably meet most demands for fish and fish products if they were properly exploited. Homemade fish flour is prepared from dried and smoked fish cooked over charcoal or wood embers.

Regional diets vary with the group considered and represent a spectrum from the primitive subsistence food of the forest-dwelling Guros to the partially purchased diets of the coffee-growing Agnis-Ashantis. The Guros have an immense craving for meat and eat all kinds in all states of decomposition. Elephant is the most prized game animal since it offers the most meat. Palm oil is used extensively as a base for cooking. Where rice cultivation is more prominent, hunting is less important.

The Agni meals are always built around basic staples such as balls of yams, bananas, manioc, taro, or all of these. Diversification is obtained through the use of various sauces which contain minerals, vitamins, and some proteins and which vary with the season and the availability of ingredients. The base is usually made of eggplant, tomatoes, chili, gumbo, groundnuts, or palm oil, or a combination of these. With onion and salt for condiments, meat and fish are included when available. The yam or plantain balls are dipped in the sauce. The tendency to buy more and more of the food consumed is a consequence of population growth.

Nutritional Diseases

Goiter is the most prevalent nutritional disease in the Ivory Coast. It is estimated that on a countrywide basis 6% of the population is affected, but rates of prevalence rise as high as 50% in certain areas. It is especially prevalent in the northwest and practically non-existent in the coastal areas.

Calcium deficiency (rickets) has been observed in the Bongouanou area as well as signs of vitamin D deprivation and occasional vitamin C deficiency (scurvy). In the Bouake district deficiencies in calcium, iron, riboflavin and animal protein are reported.

In general, however, the population of the Ivory Coast is believed to to enjoy a relatively good nutritional status compared to neighboring countries. While a large portion of the population is still at the subsistance level, a growing number of people are entering the money economy with, up to the present, a minimum of the usual consequences of this transitional period. Probably the most typical example of this evolution is that which is taking place among the groups that have begun to grow coffee and yet have not neglected their own food crops. Although their diets still leave much to be desired, primarily because the purchased foods are not always an improvement over foods obtained by the hunting and gathering of former times, at least some of the ' purchases will help to foster better health.

IVORY COAST

ECONOMIC DEVELOPMENT OF ONCHOCERCIASIS - FREE ZONES

Date Spraying Begins: Nov. 1974
Resettlement Begins: April 1976

Onchocerciasis Vector Control Program Area

Approximately 26 percent of Ivory Coast territory (87,000 km^2) is within the Onchocerciasis Control Program area. This area forms a quadrilateral over the northern section of the country and includes the departments of Korhogo, Katiola, Ferkessedougou and part of the departments of Bondoukou, Boundiali, and Odienne. The area is primarily within the sudanian climatic zone with approximately 1100-1500 mm of rainfall in a normal year. Some 16 percent (800,000 people) of the country's population inhabit the area, largely composed of two ethnic groups, the animist Senoufo (in the north-central portion of country centered around Korhogo-Ferkessedougou) and the moslem Malinke (from Boundiali west to the Guinean border). The northern region of the Ivory Coast is one of the poorest and least developed regions of the country with an average per capita income ($75) which is between 1/4 - 1/5 of the national average. Although the economy of the Ivory Coast has developed rapidly since independence, until recently few development projects have been funded in the north. Held back until the past few years by strong ethnic and family ties, more and more young northerners are now leaving rural zones for the south (approximately 55,000 in the past 10 years) and for urban communities in the north (approximately 25,000 over the same period). Major out-migration areas are (1) the Kong-Ferkessedougou area; (2) the Seguelon-Madinani area; (3) the Korhogo metropolitan area and its rural environs. Land is relatively abundant in the north with the exception of dense population clusters around Korhogo (50 inhabitants/km^2 within a 30-40 km. radius) and between Boundiali-Tingrela (approximately 25 inhabitants/km^2). Population growth in the onchocerciasis program area is approximately 2 percent per annum, rising to 3 percent when emigrants (mostly Malians and Voltaies) are included. Annual urban growth in the north is estimated at 5 percent.

Despite its relative backwardness in 1970 the north produced approximately 33 percent of Ivorian corn (71,600 tons); 90 percent of its sorghum and millet (39,000 tons); 20 percent of its rice (63,000 tons); 60 percent of its peanuts (24,500 tons); 16 percent of its ignames (216,000 tons); 33 percent of its cotton (11,000 tons) and 85 percent of locally produced beef (3,600 tons). With food imports (excluding live animals) running at approximately $44 million/yr. and growing rapidly due to increased urbanization and economic growth, spurred on by the tangential effects of the Sahelian drought, President Houphouet-Boigny, during a trip to the north in May 1974, announced the initiation of major emergency and

long-term development efforts in the north which would transform that region into the nation's major granary and stockyard. A "White Paper" (livre blanc) for development of the north was published soon after and major investments are foreseen as part of the nation's forthcoming five-year plan (1976-1980). Emphasis will be placed on production of rain-fed and irrigated rice, corn, cotton, livestock, sugar cane, tobacco, and vegetables as well as on food processing industries in the region.

Oncho-Free Economic Developed Zone

A priority zone for economic development intervention in association with the control program was initially selected in 1972 by SEDES economists and was later studied by the PAG Mission to formulate the initial outlines of a development project. This zone lies 80 km. south of Korhogo and to the immediate west of Niakaramandougou. The area of the zone is approximately 2100 km^2 of which 1350 km^2 are covered by reasonably fertile valley soils relatively unoccupied. The estimated usable area is about 56-80,000 hectares. The zone includes the valley of the Bou R., a tributary of the White Bandama, and the White Bandama itself. The majority of the zone lies within the sub-prefecture of Niakaramandougou (approximately halfway between Katiola to the south and Korhogo/Ferkessendougou to the north). The rest lies within the sub-prefecture of Dikodougou. * The area was selected due to its fertile soils, its very low population density due primarily to a high incidence of onchocerciasis, and its proximity to the one densely populated area in the northern region -- the Korhogo district. Although there are a number of projects presently being implemented or planned in the Korhogo/Ferkessedougou region -- irrigated rice, sugar cane, vegetables, mango, peanuts, feed lots -- the PAG mission felt that expansion towards the south would become a necessity for the Senoufo peoples near Korhogo as land becomes more scarce.

The proposed project zone has apparently not been occupied within recent history. Rainfall is between 1200-1400 mm/annum with a single 8-9 month wet season. Incomplete hydrological information indicates a water yield of 0.5m^3/hour from a borehold of 20 meters. The area is relatively flat lying about 260-400 meters above sea level and the Bandama and Bou rivers meander through relatively wide valleys. The soils of the project area vary from good deep loams with little gravel to shallower, more gravelly soils to the west. The western side of the Bandama valley

* The development program for the northern region of the Ivory Coast includes the Dikodougou prefecture but excludes the Niakaramandougou prefecture.

provides a wide alluvial plain while the soils between it and the narrower alluvial belt of the Bou valley to the west are ferrallitic and derived from granites -- the soils in the proposed out-migration zone around Korhogo are inherently much poorer with ferraginous and ferrallitic soils predominating, often shallow and with areas of lateritic common. The better plateau soils of the project area are suitable for a wide range of crops including cotton and rain-fed rice. The valley soils are often heavy and primarily suitable for rice and sugar cane. The poorer plateau soils are best suited for cattle grazing. Although the land is largely uninhabited and uncultivated it is likely to be claimed by a number of land owners. However, under existing law, since the land is unused and unoccupied the government can expropriate the land if it wishes.

A secondary road (Niakaramandougou-Dikodougou) now passes through the project area and additional roads in the area are planned as part of a nationwide transport plan prepared by SETEC. Only one school and one dispensary are presently found in the project zone -- both at the diamond mining town of Tortiya on the western edge of the zone.

Preliminary sociological research of both the proposed host and departure zones were carried out for two months in 1972. The host area is lightly inhabited by the Tagouana, a rather closed, traditional ethnic subgroup of the Senoufo. Little migration occurs within the region but numerous young people, mostly males, emigrate to the plantations and urban centers of the south usually via step-migration first to the nearby urban centers of Katiola and Bouake. Tagouana land chiefs claim rights to the uninhabited and uncultivated lands in the proposed project zone and will have to be carefully dealt with if the local Tagouana are to eventually agree to the exploitation of "their" land by a sizeable number of "strangers." It is not deemed likely that Tagouana from the Katiola environs will want to move north and west into the project zone as sufficient land is available elsewhere for their population expansion. The proposed migrant departure zone comprises an area with a radius of 30-40 km. around the regional capital of Korhogo. The average density in this area is 53 persons/km^2 with upper limits of 120 persons/km^2. While slow incremental migration towards the south has occurred, several recent camps near the Bandama River have had to move away from the river due to Simulium. It is felt by the study team that once these areas are cleared of onchocerciasis, the spontaneous movement of farmers will increase considerably. This may decrease the present emigration to the south estimated to reach 3000 persons yearly by 1975. The traditional, administrative and other leaders interviewed as part of the study stated unanimously that many farmers from the dense population zone would be prepared to resettle in the proposed project zone as soon as suitable conditions (clearance of oncho, provision of land, feeder roads, water supply) were created there. It is proposed that the only selection criteria

for settlers be the following: (1) that the candidates are really willing to leave forever their village and farm and to settle permanently in a new place, (2) that they are capable and adaptable farmers prepared to improve farming methods and follow the instructions of the scheme's extensionists.

Past and Present Development Activities in the Project Zone

The extension operations are now underway in the Niakaramandougou sub-prefecture: CFDT (cotton); SODERIZ (rice) and the Regional Office of the Agriculture Ministry (general agriculture development). Major activities in 1970/71 were:

- organization of short training courses for young farmers

- field demonstration of rice and cotton cultivation as well as general rural development action such as house and well building

- block cultivation, particularly rice, cotton, yams and tobacco

- promoting marketing of yams and rice.

In October 1971 there were 35 extension workers in the Niakaramandougou sub-prefecture equivalent to one worker per 68 farms. Sixty percent of these were with CFDT. Both CFDT and SODERIZ have succeeded in expanding production (they reach 40 percent and 10 percent of the farmers in the area respectively) and in 1971/72 1500 ha. of cotton (average yield of 700 kg/ha)and 1200 ha of rice were under cultivation. Eleven extension agents serve 25,000 people (approximately 4,000 farms) in the Dikodougou sub-prefecture.

Mixed cropping is common with cereal crops often interplanted in yam fields. Corn is progressively replacing sorghum and millet as the major cereals crop in the region. Approximately 20-25 percent of cultivated land is used for yams; 25-30 percent for corn; only 5-8 percent for millet and sorghum. Rice, peanuts and cotton make up most of the balance of cultivated land. Traditionally no improved seed, fertilizer or spray materials are used but diffusion of rice and cotton cultivation has led to an increased but still limited use of fertilizer. Animal traction is rarely found in the region.

Approximately 1500-2000 head of cattle are found in the Niakaramandougou sub-prefecture on 20 percent of the farms -- approximately 5 head/farm. The number of cattle in the Dikodougou sub-prefecture has increased 80 percent from 1968-73 largely due to cattle moving further south because of the drought and because of extreme degradation of 30 percent of the pasture around Korhogo.

The PAG report states that main development constraints in the proposed project zone in addition to the Simulium vector are the:

(a) absence of road network and wells;

(b) land tenure system which will become a constraint as more people move into the area;

(c) heaviness of the soils in limited area; and

(d) presence of trypanosomiasis.

Development Strategy

PAG Recommendations

The PAG mission recommended an integrated rural development approach to the project in coordination with OSDERIZ plans to extend their operations into the project zone. Since the zone apparently has no history of inhabitation, settlement rather than re-population is obvious. There has been some recent migration south from the Korhogo area especially along the Bandama area. It is expected that this flow will increase substantially as onchocerciasis is eliminated. Emphasis should be placed on production of food and cash crops rather than capital intensive schemes, although substantial capital would be needed for development of basic infrastructure. Two types of farms are envisaged: one including "bas fonds" (low ground areas) and a second without such land. The average farm size could be approximately 6 and 6.5 hectares respectively. The net available area for cropping is estimated at 69,000 ha. excluding bas fonds. At full development, the zone could comfortably accommodate 11,000 farms with a total settlement population of 66,000. Improvement and extension of primary, secondary and tertiary road networks and construction of wells, health and education facilities are also required.

A semi-guided approach is recommended with ultimate responsibility for the project assigned to an Authority set up to coordinate all socio-economic and agricultural development in lands to be freed from onchocerciasis. A five-year pilot project to settle 500 families is recommended with full settlement (66,000 people)expected by year 20. The project as proposed by PAG would require at least 30 trained local personnel for the pilot stage and over 200 for the full project, including 160 extension workers (1 per 70 farms). Total cost of the pilot stage is estimated at $2.09 million and cost of the 20-year program placed at $17.53 M (approximately $265/person). Annual production is estimated at 40,000 tons of cereals (of which 27,000 rice); 30,000 tons of yams; 8,000 tons of peanuts and 6,000 tons of cotton all valued at $5.8 M/yr. Sample farm budgets indicate that a farmer's gross economic margin will be approximately $550-570/yr. as compared to approximately $285/yr. presently in the Korhogo area.

Government Development Plans and Progress to Date

Although little information is yet available on Ivorian Government plans for development of the onchocerciasis program and the proposed project zone in particular, it is clear that this development will be carried out within the context of the development plans for the northern and central regions of the country, which geographically bisect the proposed project area. Although the central region plan is not yet available, the northern plan mentions onchocerciasis only in passing and provides no indication of special priority to the onchocerciasis project zone. However, the plan does mention several water management projects (for irrigation, water supply, river regulation) on the Bandama and Bou rivers near Korhogo. Detailed onchocerciasis project plans will be drawn up by the Delegue Regional du Plan located at Korhogo who reportedly will be assisted by French expatriate advisors.

The Ivory Coast has requested UNDP assistance in undertaking aerial photography for the onchocerciasis control region of the country and in carrying out basic mapping, hydrogeological, pedological and socio-economic studies of the proposed project zone. Aerial photography has already begun and the other studies will commence in 1975.

Recommended AID Assistance over the Next Five Years

The Ivory Coast holds a privileged economic position among the countries affected by the onchocerciasis program and given the relatively moderate cost of the proposed initial five-year pilot scheme ($2.09 M) and the full scale settlement scheme ($17.5 M) should not be a prime candidate for monies which AID sets aside for economic development of onchocerciasis-freed zones. In addition, economic development of the oncho project area does not seem to have been given any special priority among the projects included in the plan for development of the northern region of the Ivory Coast.

Present AID policy precludes bilateral grant assistance to the Ivory Coast. It is not likely that present or proposed regional assistance programs could be used to help finance such a program, even should it be given special government priority. Basic feasibility studies will be carried out with UNDP and probably French assistance precluding any need for AFDB feasibility-study monies. And it is likely that the guidelines for Entente Fund programs which may be established to provide continued AID assistance to member states for livestock and agricultural projects will preclude their use for inter-sectoral projects such as the proposed integrated rural development project. AID should consider only development loan assistance due to the relatively favorable financial position of the Ivory Coast. However, it is not likely that major capital assistance will be necessary during the pilot phase of the settlement program. Participation in the latter stages of the settlement program

should be predicated upon a positive evaluation of the pilot plan and clear indications that there is sufficient population/land pressure in the Korhogo area (along with a favorable attitude toward migration into the proposed onchocerciasis project zone) to colonize the area within a reasonable period of time (say, 15 years) and justify major capital expenditures.

IVORY COAST
SHELTER SECTOR ASSESSMENT

I. Background

In the mid-sixties, AID provided its first shelter sector assistance to the Government of the Ivory Coast (GOIC). This project was an aided self-help rural housing program financed with PL 480 funds. In 1967, a $2 million housing guaranty program was undertaken by a private U.S. company using the newly formed GOIC housing corporation SOGEFIHA (Societe de Gestion Financiere de l'Habitat) as the Administrator. In 1971, the GOIC submitted a request for a $10 million housing guaranty program to be carried out by SOGEFIHA. This project, which was approved by AID in 1972, is scheduled to be fully implemented in CY 1975. In addition to providing approximately 1200 to 1400 housing units, this housing guaranty program has served as the catalyst for the creation of the first National Savings and Housing Institution in the Ivory Coast.

The GOIC has expressed interest in continued assistance of AID in implementation of its increasingly important shelter sector programs.

II. DAP Objectives

A. To collaborate with the GOIC in the development of its national housing policy, now under GOIC review, in order to coordinate activities and programs of various para-statal housing agencies and in order to serve lower income families more effectively.

B. To develop proposals for further utilization of AID resources in accordance with AID shelter sector policies. 1/

C. To provide technical and financial assistance to the newly created National Housing Institution.

III. Shelter Needs

The Ivorian urban population (consisting of those living in the country's 127 administrative centers) totalled 1,435,000 in 1970, or 28 percent of the country's population. By the end of the decade the urban population should rise to 2,760,000 or 39 percent of the total. Abidjan, with a population estimated at 555,000 in 1970 was expected to double in size to 1,105,000 in 1980, a growth rate equaled by other urban centers, whose overall population also was expected to double, from 880,000 in 1970 to 1,655,000 in 1980. Current projections for Abidjan, however, show that even there estimates may be understated.

1/ AID Policy Determination No. 55, dated October 22, 1974.

According to a 1973 survey of housing in Abidjan, only 26.5 percent of the population of 209,000 persons were living in housing units which had full utilities; 35.4 percent or 280,000 persons were living in neighborhoods which contained some infrastructure but in which the majority of the population did not have water or sanitary facilities on the property (in Treichville, the oldest and best equipped neighborhood, 38 percent of Abidjan's populace or 300,000 persons were living in areas with no utilities or in squatter shacks).

For the period 1973 to 1980, which marks the end of the DAP period, GOIC estimates Abidjan housing needs at 10,000 housing units per year in order to accommodate demographic growth, plus an additional 4,000 units per year to replace dilapidated units.

Conditions in the interior vary, but (in 1973) 25,000 or 27,000 inhabitants in the new port city of San Pedro lived in squatter settlements on the edge of town.

Housing needs in up-country urban centers have not been quantified as completely by the GOIC but will total an additional 12,000 to 14,000 units per year for demographic growth alone. This need is particularly astute for cities designed in the plan as secondary growth centers, such as the new port city of San Pedro; the regional centers in the East, South-Central, and North; and the satellite cities outside of Abidjan.

IV. Housing Sector Policy

The GOIC 1971 to 1975 development plan, in common with earlier plans, identifies three basic areas of intervention in the shelter sector:

1. Municipal facilities and infrastructure;
2. Regional planning; and
3. Housing.

With respect to housing, GOIC limits its direct participation to financing the infrastructure for low-income rental housing projects. Housing unit construction itself is to be financed either by household savings or by foreign loans to the para-statal housing agencies.

Thus, for the DAP period 1975 to 1980, the GOIC project that capital investment would represent about 22 percent of GDP during each year, of which housing would represent 14 percent of total investments (and slightly more than 3 percent of GDP). GOIC direct investments in urban infrastructure would represent about 10 percent of public invesment.

Implementation of the GOIC basic objectives is left to several Ministries and to the para-statal organizations. Coordination is achieved through the annual budgeting process, which updates plan expenditures and legislates the investment program for the next three years, thereby providing a linkage between the plan objectives and the investment budget.

In order to assure greater coordination among the various para-statal shelter sector agencies and optimize utilization of its foreign borrowing capacity, the GOIC is currently reviewing its housing policy and has plans to centralize financing of the para-statal housing agencies through a National Housing Bank which will absorb the tax-supported National Office in order to support low-cost housing and serve as the borrower for all housing loans.

V. Constraints

A. Financial

Domestic sources for the long-term capital requirements of the shelter sector are primarily taxation, either paid directly, as in the case of the National Fund to Support Economic Housing, or indirectly, as in the case of net GOIC budgetary savings allocated to shelter infrastructure through the Annual Investment Budget.

Nevertheless, a substantial resource gap remains to be filled. This in part is accomplished through short and medium term advances from the Central Bank, but this is no satisfactory solution. The GOIC must seek funds from external borrowings, both concessional and suppliers credits. The main source of concessional funds is the French aid program, which limits its participation to 30 percent of economic rental housing. Much of the GOIC's other foreign borrowings are short term (not exceeding ten or twelve years) and are tied to procurement regulations and/or the use of an expatriate construction firm. Use of the long term non-tied AID resources, therefore, is especially well suited to the needs of the Ivory Coast.

The GOIC has attempted to encourage domestic savings through the sale of Development Bonds and other comparable techniques. However, no systematic effort has yet been fully developed to use the desire for shelter as a stimulus for a generalized, free savings program.

The proposed National Savings and Housing Institution which AID is assisting the GOIC to develop should help the Government to overcome this problem as it is a major institutional breakthrough.

B. Structural

The number of para-statal shelter sector agencies requite a degree of coordination which has not always been possible. The GOIC is taking steps, as yet not announced, to restructure the financing of the sector in order to assure more coordination.

In addition, the availability of land, construction standards, and other support and regulatory activities require improved programming.

The GOIÇ should re-evaluate the potential role of the private sector, to which at the present time it arrogates roles only at the extremes, i.e., luxury and slum housing. Controls and financing need to be applied to encourage private sector participation in the moderate and low-income markets. This is particularly necessary if the new savings institution is to fulfill its purpose.

VI. Employment

Housing construction has been a major source of employment in the Ivory Coast, following the classic technique of absorbing rural migrants into the urban work force through regular supervised employment in home construction. The two projects being built through the current HG program, for example, will have provided about 15,000 man months of employment or about 2,000 man months per million dollars of investment.

The development of Ivorian enterepreneurial and management capacity is a major thrust of GOIC policy. The large amount of Ivorian home building has provided an opportunity for small builders to grow into medium-sized companies. Most of the individual housing units built in Abidjan and in the interior, including upper-income housing, is built by local builders. Rural housing offers the same opportunities on a technically less demanding basis. Two recent housing projects (200 units by SICOGI and 578 HG-financed units by SOGEFIHA) were bid to permit small builders to participate.

If the GOIC can maintain a substantial shelter program, it will not only provide employment in construction, but also in the construction materials and allied industries, e.g., home furnishings.

VII. Shelter Institutions

In conformity with its developmental progress, the Ivory Coast contains a broad range of shelter sector institutions and an increasing specialization of function. The following are para-statal.

A. SICOGI (National Housing Construction and Management Company) is a mixed public-private corporation under the general supervision of the Ministry of Construction. It is the largest and oldest housing agency in the Ivory Coast. SICOGI is funded in part by the French government and in part by the GOIC.

B. OSHE (Office of Support for Economic Housing) provides capital for construction of low-income housing; for urbanization cost for low-income houses; or interest subsidy payments. It is funded through a one percent GOIC payroll tax.

C. SOGEFIHA (National Housing Finance Company) was created in 1964 as a vehicle for absorbing non-French foreign housing loans. SOGEFIHA was the Administrator of the first HG housing project in the Ivory Coast and the borrower for the second. Using U.S., Israeli, Norweigan, Lebanese and Eurodollar loans, as well as advances from the GOIC, SOGEFIHA has constructed more than 10,000 urban housing units (and 4,000 aided self-help rural housing units, partially financed by $1.2 million in PL 480 funds). Urban units have been constructed for sale, lease-purchase, and rent, and SOGEFIHA has an HG-financed mortgage portfolio. Urban units have been mostly low to middle-income for expatriate technical assistants. Ivorian managed from the start, SOGEFIHA's portfolio has grown rapidly during the past few years. Recently a new General Manager has been named and some reorganization is planned in connection with the contemplated GOIC structural changes in the shelter sector.

D. SETU (Society for Equipment of Urban Land) was organized to urbanize, equip, sub-divide and sell urban land for industrial or housing use. SETU has undertaken both types of project, primarily in Abidjan. It operates in line with Ivorian (and general Francophone) policy which limits home-ownership to middle and upper income groups.

E. CCI (Ivory Coast Credit Bank) was originally a French colonial social credit institution, CCI spun off its agricultural and then its industrial development loan programs and now concentrates on housing, small business and consumer credit, of which housing represents more than half its portfolio and two-thirds of its recent activity. It has made more than 1,000 individual mortgages a year in the last two years, and currently services more than 8,000. About 80 percent of these are in Abidjan.

F. Proposed National Savings and Housing Institution. This new institution was to have been organized in connection with execution of the second HG program. Basic legislation, and operating rules have been prepared with technical assistance from AID. The GOIC indicated the enabling legislation will be passed in early 1975. This will be the first savings institution in the country and its progress will be closely watched to determine the impact of U.S. concepts and assistance in a field traditionally dominated by French institutions. To be successful, this institution will require both financial and technical assistance.

VIII. Other Donors

France is the major donor to the above institutions, contributing financing through CCCE, their aid fiduciary, and technical assistance from

a variety of sources to the Ministry of Construction and Town Planning and a number of the para-statal agencies.

Other donors who have contributed to the GOIC shelter program are the UNDP, West Germany, and the Peace Corps.

IX. Current Housing Guaranty Program

The $10 million current AID shelter program, which was approved in April 1972, provides for the construction of approximately 1,200 to 1,400 housing units for moderate income families. The implementing agency for this program is the GOIC housing institution -- SOGEFIHA. In addition to providing shelter for 7,000 to 8,000 Ivorians, the current AID shelter program has served as the vehicle for assisting the GOIC to take the initial steps toward developing its first National Savings and Housing Institution. The legislation for this new financial institution is now being reviewed by the Council of Ministers of the Ivory Coast.

X. Proposed New Housing Guaranty Program

Formal new program proposals should await completion of a new shelter sector study. However, in light of present GOIC trends and policies, it is likely that such proposals will probably include, but not necessarily be limited to the following:

A. Housing projects for those employed at minimum wage levels;

B. Continuing sites and services projects. These, however, will depend upon the outcome of pilot sites and services program now in planning;

C. Financial and technical assistance to newly-organized thrift and mortgage institution;

D. Low-income housing projects in the interior urban centers, in order to assure a more equitable national distribution of new housing; and

E. Sectoral advances to the new national housing bank, organized in line with a revised national housing policy to serve as the shelter sector fiduciary, for use in financing low-income shelter in accordance with AID shelter sector policy.